22-1-533



#### CANADA

# DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS AGRICULTURAL BRANCH

THE PRODUCTION AND DISTRIBUTION OF COARSE GRAINS

#### II. OATS

A survey of statistical and other data relating to Canadian oats — production and trade.

Published by Authority of the HON. H. H. STEVENS, M. P., Minister of Trade and Commerce.

#### DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS - CANADA AGRICULTURAL BRANCH

Dominion Statistician: Chief, Agricultural Branch:

R. H. Coats, B.A., F.S.S. (Hon.), F.R.S.C. T. W. Grindley, Ph.D.

#### OATS

The cultivation of oats is of more recent date than that of wheat and barley. While the origin of the cultivation of wheat can be traced in all probability to a warm climate and that of rye to a cold climate, oats are found occupying an intermediate position. It is not possible to find any record of their use by the ancient peoples of Egypt, Palestine, Greece, Rome, India, or China. Probably oats were cultivated at an early date by people who inhabited east-central Europe, and some historians point more definitely to Tartary in Western Asia as the probable place of their first cultivation. Oats were less important than wheat, barley or rye in the early development of southern Europe, but came into much greater use with the civilisation and expansion of the central and northern (temperate) portions of the continent. The crop, being particularly suited to the cool, moist climate, became a leading cereal.

having many other uses besides that of a food for man, the oats crop has continually expanded in the natural sequence of crop cultivation. At first only such crops were grown as would serve for human food and natural meadows provided sufficient forage for domestic animals. With increasing population more and more ground was devoted to the production of cereals for human consumption. The value of land rose and natural pastures were broken up. Other crops were grown as food for live stock, and thus the use of fodder crops, like oats, has become an increasingly important part of husbandry, especially in temperate regions.

On the basis of acreage and bushels produced, oats rank second only to wheat. The following table shows acreage and production of oats in North America and Europe (the main oats producing areas) in 1932:

	Acreage			Production	
	Wheat (million	Oats acres)	Whea	t Oats million bushels)	
North America	82.4	54.3	1,16	4 1,658	
Europe (excluding Russia)	85.9	42.2	1,48	5 1,828	
Total	168.3	96,5	2,649	9 3,486	

While the area sown to oats is considerably less than the area sown to wheat in North America and Europe, production of oats, in bushels, exceeds that of wheat by about 800,000,000 bushels due to higher yields per acre. On a tonnage basis, of course, the production of wheat exceeds that of oats by a considerable margin.

Oats are produced over a wide area but heaviest production is found in the middle western areas of the United States, Canada, the United Kingdom, Germany, France and Russia. These six countries produce about 75 per cent of world production of oats.

#### Uses of Oats

The nature of the disposition of the world production of oats is indicated by the fact that although world production amounts to about 4,500,000,000 bushels, world trade in oats amounts to only about 100,000,000 bushels, or slightly over 2 per cent of production. Therefore the great bulk of world production of oats is consumed at or near areas of production.

The chief use of oats is as a feed for live stock. Oats are the standard feed grain for horses and, alone or in combination with other grains, are used as a feed for cattle, sheep, hogs and poultry. In Bulletin 127 issued by the Department of Agriculture (Ottawa) the following comparative analysis of coarse grains is given:

	Water	Ash	Crude Protein	Fibre	Nfree Extract	Fat	T.D.N. /
The state of the s	%	%	%	%	%	%	lb.
Oats	9,2 9,3 10.5	3.5 2.7 1.5	12.4 11.5 10.1	10.9 4.6 2.0	59.6 69.8 70.9	4.4 2.1 5.0	70.4 79.4 85.7 80.1
Corn	10.5	1.5	10.1	2.2	70.9		2.1

/ Total digestible nutrients per 100 pounds.

From the above table it will be noted that, in spite of a high percentage fibre content, oats are relatively high in protein and fat. Oats rank with wheat in protein content and are higher than wheat and barley in fat content.

Oats are grown as a hay crop, being harvested before maturity for this purpose. A relatively small amount of oats is used for human consumption in the form of rolled oats and oatmeal.

Oats are used extensively in crop rotation plans. As a rule, cats may be sown on land which was devoted to wheat in the previous year. The relatively short growing season make cats an attractive crop in northerly areas, especially where rainfall is heavier.

#### Production of Oats in Canada

The relative position of oats as a cereal crop is shown in the following table. The percentages are based upon the January estimates of the 1932 crop:-

	Area (Acres)	Per cent	Production (Bushels)	Production (Tons)	Per cent
Wheat Oats Barley Rye	27,182,100 13,148,400 3,757,600 773,800	60.6 29.3 8.4 1.7	428,514,000 391,561,000 80,773,000 8,938,000	12,855,400 6,656,500 1,938,500 250,300	59°2 30°7 8°9 1°2
TOTAL	44,861,900	100.0	909,786,000	21,700,700	100.0

The area sown to oats in Canada in 1932 amounted to 13,148,000 acres compared with an area of 27,182,100 acres sown to wheat; 3,757,000 acres sown to barley and 773,800 acres sown to rye. In other words, of the total area sown to the four leading cereal crops 29.3 per cent was sown to oats.

According to the third estimate of 1932 cereal production, issued by the Dominion Bureau of Statistics on January 20, 1933, production of oats in Canada amounted to 391,561,000 bushels compared with wheat production of 428,514,000 bushels, barley production of 80,773,000 bushels, and rye production of 8,938,000 bushels.

Converting the foregoing production figures to a tennage basis, as shown in the above table, total production of the four cereals amounted to 21,700,464 tons of which 6,656,500 tons or 30.7 per cent consisted of oats.

#### Development of Production

The following table shows acreage, yield per acre and production of oats in Canada from 1910 to 1932:

Year	Area	Yield per Acre	Total Yield
Fire A payridge of the	(Acres)	(Bushels)	(Bushels)
1.908	7,911,000	316	250,377,000
1909	9,303,000	33.0	353,466,000
1910	8,656,000	28.4	245,393,000
1911	9,641,000	37.9	365,694,000
1912	9,966,000	39.3	391,629,000
1913	10,434,000	38,8	404,669,000
1914	10,062,000	31.1	313,078,000
1915	11,556,000	40.2	464,954,000
1916	10,996,000	37.3	410,211,000
1917	13,313,000	30 . 3	403,010,000
191.8	14,790,000	28.8	426,313,000
1919	14,952,000	26.3	394,387,000
1.920	15,850,000	33,5	530,710,000
1921	16,949,000	25.3	426,233,000
1922	14,541,000	33.8	491,239,000
1923	14,388,000	39.3	563,998,000
1924	14,491,000	28,0	405,976,000
1925	12,556,000	32.0	402,296,000
1926	12,741,000	30.1	383,416,000
1927	13,240,000	33,2	439,713,000
1928	13,137,000	34.4	452,153,000
1929	12,479,000	22.7	282,838,000
1.930	13,259,000	31.9	423,148,000
1.931.	12,871,000	25,5	328,278,000
1932	13,148,000	29.8	391,561,000

The development of oat production in Canada is marked by a rapid increase in the area sown to oats between 1908 and 1921. In 1908 a total of 7,911,000 acres were sown to oats. By 1914 the area had been increased to 10,062,000 acres. During the world war, the acreage devoted to oats was increased by nearly five million acres. The area sown to oats in Canada reached its high point in 1921 when 16,949,000 acres were reported.

From 1921 to 1925 the area sown to oats decreased steadily and in the latter year 12,556,000 acres were sown, a decrease of over four million acres from the area sown to oats in 1921.

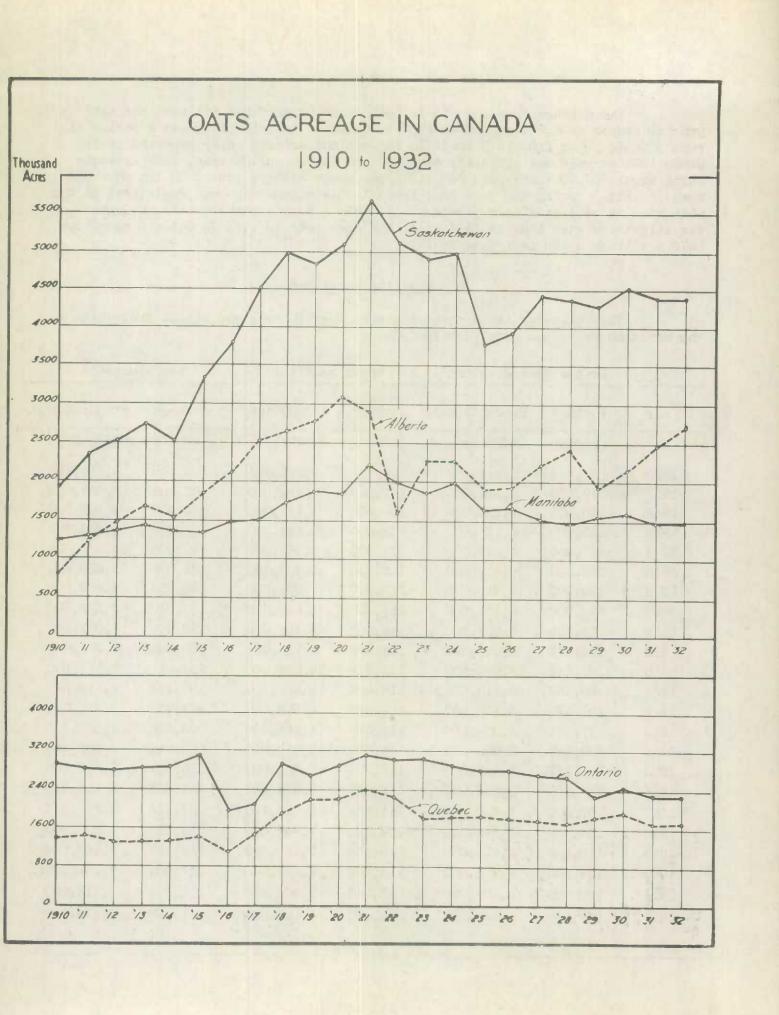
During the past seven years, or from 1926 to 1932 the area sown to oats has remained relatively constant, averaging slightly over 13 million acres.

During the five years from 1909 to 1914 production of oats averaged 351 million bushels per year while during the five years from 1928 to 1932 production averaged 375 million bushels. In 1920 and 1923 exceptionally large crops of oats were harvested and total production exceeded 500 million bushels in each year.

# Production of Oats in Eastern Canada A. Quebec and Ontario

The following table shows acreage and production of oats in Quebec and Ontario from 1910 to 1932:

	Que	ebec	Ont	ario
Year	Area	Production	Area	Production
	(Acres)	(Bushels)	(Acres)	(Bushels)
1910	1,387,961	33,734,172	2,871,288	88,946,041
1911	1,430,209	37,500,000	2,806,203	84,860,000
1912	1,296,000	33,516,000	2,785,000	97,053,000
1913	1,303,000	39,025,000	2,814,000	105,159,000
1914	1,327,000	42,119,000	2,840,000	99,400,000
1915	1,400,000	42,182,000	3,095,000	122,810,000
1916	1,073,000	24,411,000	1,991,000	50,771,000
1917	1,492,700	32,466,200	2,687,000	98,075,500
1918	1,932,720	52,667,000	2,924,468	131,752,600
1919	2,141,107	57,275,000	2,674,341	78,388,000
1920	2,205,908	66,729,000	2,880,053	129,171,300
1921	2,366,810	50,591,000	3,094,958	72,575,000
1922	2,252,016	62,281,000	3,034,090	116,034,000
1923	1,819,920	48,845,000	2,967,417	103,485,000
1924	1,838,000	50,913,000	2,891,990	114,249,000
1925	1,856,000	54,010,000	2,837,390	118,100,500
1926	1,856,000	49,741,000	2,831,755	95,722,000
1927	1,782,000	50,609,000	2,689,295	101,914,000
1928	1,746,000	41,031,000	2,659,980	93,461,000
1929	1,826,042	47,475,000	2,335,310	73,640,000
1930	1,899,800	50,635,000	2,469,000	97,482,000
1931	1,680,525	47,223,000	2,343,884	78,520,000
1932	1,735,500	51,024,000	2,338,000	75,517,000

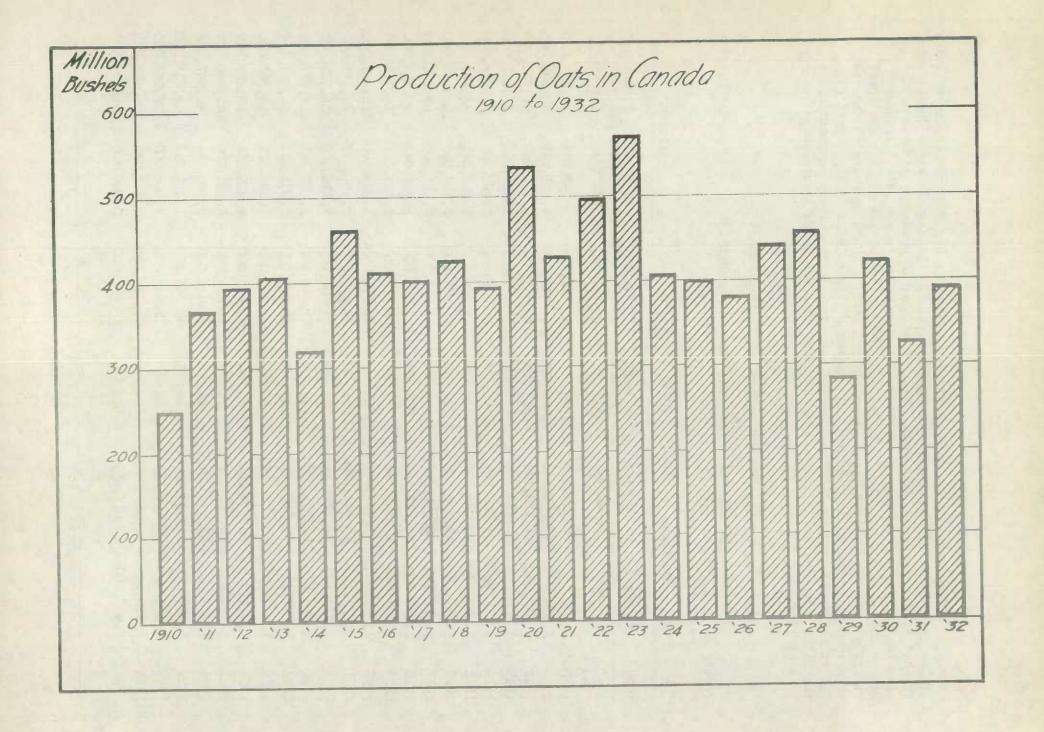


The acreage sown to oats in Quebec and Ontario has followed the same general course as the trend of acreage in Canada. In both provinces a period of expansion is noted from 1910 to 1921, the maximum acreage being reported in 1921. Since 1921 acreage has gradually decreased in Quebec and Ontario, 1932 acreages being about 600,000 acres and 700,000 acres respectively, less than the acreages sown in 1921. During the past four years little change has been registered in the area sown to oats in either province. In 1932 the area sown to oats in Quebec was slightly higher than in 1914 while the area sown to oats in Ontario was about half a million acres less than in 1914.

#### B. Maritime Provinces

The following table shows the area sown to oats and annual production in the Maritime Provinces from 1910 to 1932.

	Prince Ed	dward Island	Nova	Scotia	New Br	unswick
Year	Acreage	Production	Acreage	Production	Acreage	Production
	(Acres)	(Bushels)	(Acres)	(Bushels)	(Acres)	(Bushels)
1910	181,636	5,211,588	96,177	2,973,769	201,140	5,538,796
1911	179,068	5,336,000	101,010	2,454,000	207,408	5,986,000
1912	180,000	7,358,000	100,000	3,267,000	1.95,000	5,607,000
1913	180,000	6,143,000	101,500	3,291,000	195,000	5,946,000
1914	183,000	7,596,000	101,800	3,461,000	200,000	6,488,000
1915	196,000	6,832,500	112,000	3,487,700	201,000	5,559,600
1916	199,000	7,413,000	11.6,000	4,031,000	198,000	6,039,000
1917	201,000	6,482,300	123,000	3,597,000	190,000	4,275,000
1918	1.69,729	5,839,000	145,036	5,403,000	224,442	7,051,400
1919	174,937	6,038,000	158,838	5,718,000	305,484	9,261,00
1920	183,452	5,095,000	152,976	4,636,800	309,071	9,117,60
1921	189,453	5,118,000	136,904	3,927,400	189,453	5,118,00
1922	182,599	6,533,000	136,862	4,549,000	313,937	9,666,00
1923	167,891	5,881,100	113,015	3,879,000	225,695	7,007,40
1924	169,137	5,065,000	115,771	3,856,000	205,244	5,902,00
1925	168,727	5,519,000	117,174	3,878,000	225,402	6,813,50
1926	160,590	5,564,000	113,957	3,849,000	204,686	5,118,00
1927	162,001	4,412,000	111,534	3,727,700	203,536	5,227,00
1928	164,062	5,593,000	109,163	3,648,000	209,085	6,339,00
1929	170,105	5,524,000	109,836	3,523,300	216,530	6,588,00
1930	174,700	5,712,000	115,200	3,867,000	223,000	7,246,00
1931	149,059	4,800,000	83,743	2,906,000	216,516	6,718,00
1932	149,500	5,083,000	85,100	3,013,000	216,500	6,776,00

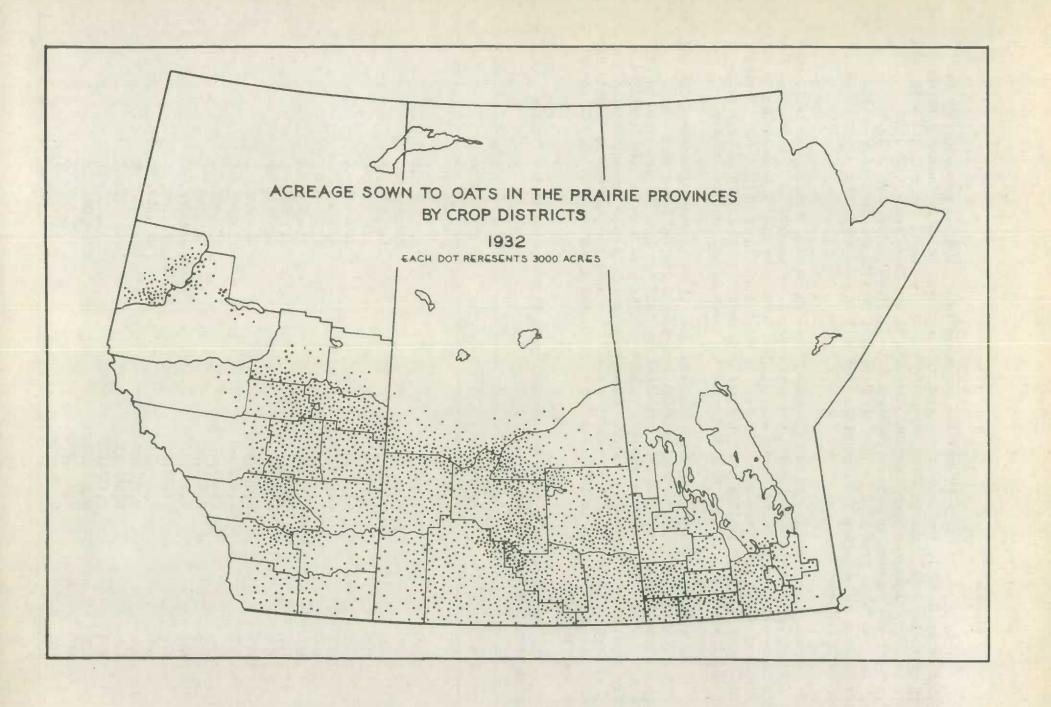


The area sown to oats in the Maritime Provinces has remained relatively stable since 1910. In Prince Edward Island a slight expansion is noted during the war but this increase was not maintained. A noticeable decrease is shown in the past two years when the area sown to oats was the lowest since 1910. In Nova Scotia the area sown to oats increased slightly during the war and has declined steadily since 1919 with a sharp recession in 1931. A sharp increase in the area sown to oats in New Brunswick occurred between 1917 and 1922. A large part of the increase was lost in 1923 and acreage has remained relatively constant since that time. New Brunswick is the only maritime province where 1932 acreage exceeded that of 1914.

#### Production of Oats in Western Canada

The following table shows acreage and production of oats in the Prairie Provinces from 1910 to 1932.

Manitoba		itoba	Saska	tchewan	Alberta		
Year	Acreage	Production	Acreage	Production	Acreage	Production	
	(Acres)	(Bushels)	(Acres)	(Bushels)	(Acres)	(Bushels)	
1910	1,209,173	30,346,879	1,888,359	58,922,791	783,074	16,893,840	
1911	1,307,434	60,011,000	2,332,802	107,542,000	1,221,217	58,985,000	
1912	1,348,000	57,154,000	2,556,000	117,537,000	1,461,000	67,630,000	
1913	1,398,000	56,759,000	2,755,000	114,112,000	1,639,000	71,542,000	
1914	1,331,000	31,951,000	2,520,000	61,816,000	1,502,000	57,076,000	
1915	1,317,365	50,750,000	3,336,245	145,066,000	1,827,071	83,876,000	
1916	1,443,599	48,439,000	3,791,807	163,278,000	2,124,081	102,199,000	
1917	1,500,000	45,375,000	4,521,600	123,213,600	2,537,900	86,288,600	
1918	1,714,894	54,473,500	4,988,499	107,253,000	2,651,548	60,323,000	
1919	1,847,267	57,698,000	4,837,747	112,157,000	2,767,372	65,725,000	
1920	1,873,954	57,657,000	5,106,822	141,549,000	3,089,700	115,091,000	
1921	2,226,376	49,442,500	5,681,522	170,513,000	2,911,743	64,192,000	
1922	1,851,608	74,433,000	5,098,104	179,708,000	1,614,500	35,519,000	
1923	1,834,504	58,704,000	4,898,771	218,075,000	2,299,546	114,977,000	
1924	1,953,337	70,729,000	4,942,465	97,345,000	2,303,624	55,251,000	
1925	1,623,238	50,107,000	3,751,840	102,297,000	1,899,511	58,762,000	
1926	1,654,474	52,778,000	3,921,461	110,193,000	1,915,953	57,479,000	
1927	1,544,511	25,767,000	4,412,556	142,526,000	2,248,000	101,160,000	
1928	1,458,401	53,376,000	4,358,747	156,043,000	2,340,263	88,257,000	
1929	1,558,404	30,740,000	4,255,789	68,944,000	1,917,744	41,936,000	
1930	1,590,000	50,562,000	4,531,000	125,509,000	2,165,000	77,940,000	
1931	1,495,944	25,500,000	4,368,735	67,700,000	2,447,288	90,500,000	
1932	1,463,500	36,826,000	4,364,700	107,400,000	2,704,800	101,500,000	



Acreage sown to cats in Manitoba increased from 1,209,173 acres in 1910 to 2,226,376 acres in 1921, the increase between 1920 and 1921 being particularly marked. A sharp recession took place in 1922. Apart from a noticeable increase in the area sown to cats in 1924, there has been a gradual decrease in the last decade. In 1932 1,463,500 acres were sown to cats as compared with 1,331,000 acres sown in 1914. During the five years from 1910 to 1914 production of cats in Manitoba averaged 47 million bushels while during the five years from 1928 to 1932 production averaged 39 million bushels.

Acreage sown to oats in Saskatchewan increased rapidly from 1910 to 1921, over 3 1/2 million acres being added during the twelve years. From 1921 to 1925 the area sown to oats decreased from 5,681,522 acres to 3,751,840 acres. By 1927 the area sown to oats had increased to 4,412,556 acres and remained at about that figure until 1932. During the five years from 1910 to 1914 production of oats averaged 92 million bushels while during the five years from 1928 to 1932 production averaged 125 million bushels.

In Alberta a sharp increase in the area sown to oats occurred between 1910 and 1911. The expansion continued steadily until 1920 when 3,089,700 acres were sown. Acreage contracted drastically in 1922 but about one half the loss was recovered in 1923 and 1924. Another sharp decline occurred in 1925 but the area sown to oats increased steadily from 1925 to 1928 when 2,340,263 acres were sown. In 1929 acreage declined to 1,917,744 acres. In the last three years, however, the area sown to oats in Alberta has increased sharply. Acreage in 1932 amounted to 2,704,800 acres or about 800,000 acres higher than in 1929.

The following table shows acreage and production of oats in the Prairie Provinces from 1910 to 1932.

Year	Acreage	Production
	(Acres)	(Bushels)
1910	3,880,606	106,163,510
1911	4,861,453	226,538,000
1912	5,365,000	242,321,000
1913	5,792,000	242,413,000
1914	5,353,000	1.50,845,000
1915	6,480,681	279,692,000
1916	7,359,487	313,916,000
1917	8,559,500	254,877,200
1918	9,354,941	222,049,500
1919	9,452,386	235,580,000
1920	10,070,476	314,297,000
1921	10,819,641	284,147,500
1922	8,564,212	289,660,000
1.923	9,032,821	391,756,000
1924	9,199,426	223,325,000
1925	7,274,589	211,166,000
1926	7,491,888	220,450,000
1927	8,205,067	269,453,000
1,928	8,157,411	297,676,000
1929	7,731,937	141,620,000
1930	8,286,000	254,011,000
1931	8,511,967	183,700,000
1932	8,533,000	245,726,000

Considering the Prairie Provinces as a whole the acreage sown to oats more than doubled during the years from 1910 to 1921. Between 1921 and 1925 a marked recession took place and acreage decreased by about 3 1/2 million acres. Between 1925 and 1927 the area sown to oats increased by about 1 million acres. Since 1927 acreage has remained relatively stable, averaging slightly over 8 million acres. During the five-year period from 1910 to 1914 production averaged 193 million bushels while during the five-year period from 1928 to 1932 production averaged 224 million bushels.

### The Distribution of Oats in Prairie Provinces

The following table shows the 1932 area sown to oats in the Prairie Province by Crop Districts:

Crop District	Manitoba	Saskatchewan	Alberta
	(Acres)	(Acres)	(Acres)
1	99,340	444,000	81,400
2	192,970	455,300	82,500
3	312,140	738,000	78,700
4	18,620	150,000	152,800
5	71,500	634,400	219,900
6	30,240	739,000	327,300
7	224,870	438,000	278,100
8	124,870	335,000	342,200
9	87,250	431,000	79,000
10	144,930		324,100
11	71,580	-	200,400
12	36,480		28,400
13	34,720	They - district	74,100
14	13,990	The second second	127,100
1.5	a.d.e		96,800
16	446		208,800
17			3,200
TOTAL	1,463,500	4,364,700	2,704,800

The map of the Prairie Provinces on Page 9 shows the distribution of acreage sown to oats in 1932.

#### British Columbia

The following table shows the area sown to oats in British Columbia from 1910 to 1932:

Year	Area	Production
	(Acres)	(Bushels)
1910	33,209	1,701,533
1911	45,299	2,378,000
1912	45,000	2,507,000
1913	48,500	2,692,000
1914	56,700	3,171,000
1915	71,000	4,390,600
1916	60,000	3,630,000
1917	60,200	3,235,800
1918	39,000	1,550,000
1919	45,021	2,127,000
1920	47,992	1,663,000
1921	56,535	2,756,000
1922	57,51.3	2,516,000
1923	61,048	3,144,000
1924	71,721	2,666,000
1925	76,393	2,809,000
1926	82,464	2,972,000
1927	86,530	4,370,000
1928	90,815	4,405,000
1929	89,717	4,468,000
1930	91,000	4,195,000
1931	85,647	4,411,000
1932	90,800	4,422,000

As shown by the above table there has been a gradual expansion in the area sown to oats in British Columbia. Since 1920 acreage has increased from 47,992 acres to 90,800 acres in 1932. Production of oats in British Columbia has averaged well over 4 million bushels per year in the past six years.

#### Distribution of Acreage and Production by Provinces, 1932.

	Area (Acres)	Per cent	Production (Bushels)	Per cent
Prince Edward Island	149,500	1.1	5,083,000	1.3
Nova Scotia	85,100	.6	3,013,000	8 .
New Brunswick	216,500	1.6	6,776,000	1.7
Quebec	1,735,500	13.1	51,024,000	13.0
Ontario	2,338,000	17.8	75,517,000	19.3
Manitoba	1,463,500	11.2	36,826,000	9.4
Saskatchewan	4,364,700	33.3	107,400,000	27.5
Alberta	2,704,800	20.6	101,500,000	25.9
British Columbia	90,800	.7	4,422,000	1.1
TOTAL	13,148,400	100.0	391,561,000	100.0

The foregoing table shows that 33.3 per cent of 1932 acreage sown to oats was in Saskatchewan, 20.6 per cent in Alberta and 11.2 per cent in Manitoba. The Prairie Provinces accounted for 65.1 per cent of the total Canadian acreage devoted to oats in 1932. Ontario and Quebec had 17.8 and 13.1 per cent respectively of the total acreage sown to oats. The balance, 4.0 per cent, was distributed among the Maritime Provinces and British Columbia.

#### Yields Per Acre

The following table shows the yield per acre of oats in each of the nine provinces from 1920 to 1932:

Year	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
	wedgen ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	(1	Bushels per acr	e)	
1.920	34.5	30.3	29.5	30.2	44.9
1921	27.8	28.7	27.0	21.4	23.4
1922	<b>35</b> <sub>3</sub> 8	33.2	30.8	27.6	38.2
1923	35,0	34.3	31.0	26.8	34.9
1924	29.9	33,3	28,8	27.7	39.5
1925	32.7	33,1	30.2	19.1	41.6
1926	34.6	33.8	25.0	26.8	33.8
1927	27,2	33.4	25.7	28.4	37.9
1928	34.1	33.4	30,3	23.5	35,1
1929	32.5	32.1	30,4	26.0	31.5
1930	32.7	33.6	32.5	26.6	39.5
1931	32.2	34.7	31.0	28.1	33.5
1932	34.0	35.5	31.3	29.4	32.3
ong-time					
rage Yield	33 3	32.7	28.9	26.6	35.5

Year Manitoba		Saskatchewan	Alberta	British Columbia
	The second section of the second section of the second section section section section section section section	(Bushels pe	er acre)	of self-know. We referred the expension with the control of the co
1920	30.8	27.7	37.2	34.7
1921.	22.2	<b>30</b> .0	22,0	48.7
1922	40.2	35.2	22.0	43.7
1923	32.0	44.5	50.0	51.5
1924	36.2	19.7	23.9	37.2
1925	30.9	. 27.3	30,9	36.8
1926	31.9	28.1	30.0	36.0
1927	16.7	32.3	45.0	50.5
1928	36.6	35.8	37.7	48.5
1929	19.7	16.2	21.9	49.8
1930	31.8	27.7	36.0	46.1
1931	17.0	1.5.5	37.0	51.5
1932	25.2	24 6	37 .5	48.7
Long-time				
verage Yield	32,2	31. 5	34.6	48.2

#### Comparative Yields per acre of Cereal Crops

The following table shows the yield per acre of cereal crops in Canada and separate yields for the Prairie Provinces:

	and the same of the same of the same	CANA	DA	was a second of the second and the s	PRAIRIE PHOVINCES				
Year	Wheat	Barley	OATS	Rye	Wheat	Barley	OATS	Rye	
		Bushels pe	er acre)	Auto 15. jug migs a Tibundi milatika d	(	Bushels pe	er acre)		
1.922	17.8	27.8	<b>33</b> 。8	15.5	1.7.7	27.0	33.8	15.3	
1923	21.7	27.8	39.3	16.0	21.7	27.4	43.4	16.0	
1924	11.9	26.1	28.0	15.4	11.2	25.0	24.3	15.0	
1925	19.0	24.7	32.0	14.2	18.6	23.3	29.0	13.4	
1926	17.8	27.4	30,1	16.2	17.5	26.9	29.4	16.0	
1927	21.4	27.7	33.2	20.9	21.2	26.7	32.8	21.4	
1928	23.5	27.9	34.4	17.4	23.5	27.4	36.5	17.4	
1929	12.1	17.3	22.7	13.3	116	15.6	18.3	13.0	
1930	16.0	24.3	319	15.2	16.0	24.8	34.7	18.7	
1931	12.3	17.9	25.5	6.8	11.8	15.7	22.1	5.9	
1932	15.8	21.5	29.8	11.6	1.5 . 5	20.0	28.8	10,,9	

#### The Grading of Oats

Under the Canada Grain Act, the prescribed grades for oats in the Western Inspection Division are as follows:

No. 1 Canada Western oats shall be white, sound, clean and free from other grain, shall contain 95 per cent of white oats, and shall weigh not less than 36 pounds to the bushel.

No. 2 Canada Western oats shall be sound, reasonably clean and reasonably free from other grain, shall contain 90 per cent of white oats, and shall weigh not less than 34 pounds to the bushel.

No. 3 Canada Western oats shall be sound, but not clean enough or sufficiently free from other grain to be graded as No. 2, and shall weigh not less than 34 pounds to the bushel.

No. 1 black or mixed oats shall be sound, clean, free from other grain, and weigh not less than 36 pounds to the bushel.

No. 2 black or mixed oats shall be sound, reasonably clean, reasonably free from other grain, and weigh not less than 34 pounds to the bushel.

Extra No. 1 feed oats shall be sound, except as to frost, shall be reasonably clean, and shall weigh not less than 38 pounds to the bushel. It shall not contain singly or in any combination more than 4 per cent of other grains.

No. 1 feed oats shall be oats excluded from the preceding grades on account of damage other than heating. It shall be reasonably clean and shall weigh not less than 34 pounds to the bushel. It shall not contain singly or in any combination more than 8 per cent of other grains.

No. 2 feed oats shall include oats weighing less than 34 pounds to the bushel or otherwise unfit for No. 1 Feed.

#### Grading of Inspections

The following table shows inspections of oats in 1930-31, 1931-32 and in the first eight months of 1932-33:

	1.930	0-31	1.931	L-32	1,93	1.932-33		
	Cars	% of total Inspection	Cars	% of total Inspection	Cars (Augus	% of total Inspection st to March)		
No. 1 C.W.	41	.3	144	.7	22	. 3		
No. 2 C.W.	2,939	19.5	5,088	25.5	2,686	36.4		
No. 3 C.W.	3,444	22.8	5,083	25.5	2,229	30.3		
Special Feed	56	.4	121	.6	28	.4		
Extra No. 1 Feed	205	1.4	1,002	5.0	146	2.0		
No. 1 Feed	2,628	17.4	5,360	26.9	1,442	19.6		
No. 2 Feed	1,141	7.6	1,571	7.9	442	6.0		
No. 3 Feed	131	.9	152	.8	51	.7		
Mixed Feed	24	.2	16	.1	42	.6		
Rejected	29	.2	27	.14	3	.04		
No Grade	4,458	29.5	1,388	6.9	276	3.7		
Sample	2	.002	5	。03	-	p		
TOTAL	15,098	100	19,957	100	7,367	100		

In 1931-32 10,171 cars of oats graded No. 2 C.W. or No. 3 C.W. out of total inspections of 19,957 cars. In other words, 51 per cent of total inspections fell into these two grades. 5,360 cars or 26,9 per cent of inspections graded No. 1 Feed. During this crop year 77.9 per cent of inspections graded within the above-mentioned three grades. The balance, or 22.1 per cent, was distributed among other grades.

During the present crop year (eight months) 4,915 cars or 66.7 per cent graded No. 2 C.W. or No. 3 C.W. 1,442 cars or 19.6 per cent of inspections were graded as No. 1 Feed. 86.3 per cent of total inspections of oats during the first eight months of 1932-33 graded No. 2 C.W. No. 3 C.W. or No. 1 Feed.

In 1930-31 a smaller percentage of total inspections was placed in the higher grades on account of the damp grain received in that year.

It is apparent from the above data that in the main, Canadian oats qualify as a relatively high quality industrial or feed product. As will be pointed out in subsequent pages only a small percentage of the Canadian oat crop is delivered to contract markets.

Disposition of Canadian Production of Oats

Estimated Disposition of Oat Crops - 1920-31 to 1931-32.

		TOTAL SU	IPPLIES			STOCKS ACC	COUNTED FOR	
	Inward Carry-over	New Crop	Imports #	Total Supplies	Exports	Outward Carry-over	Total	Domestic / Disappearance
				(Bushe	els)			and the same of the superior of the superior
1920-21	9,580,917	530,710,000	939, 955	541,330,872	28,714,482	43,960,349	72,674,831	468,656,041
1921-22	43,960,349	426,233,000	119,334	470,312,683	27,038,248	15,740,329	42,778,577	427,534,106
1922-23	15,740,329	491,239,000	1,063,336	508,042,665	23,561,178	21,811,482	45,372,660	462,670,005
1923-24	21,811,482	563,998,000	185 362	585,994,844	37 625 144	52,098,899	89,724,043	496,270,801
1924-25	52,098,899	405,976,000	933,323	459,008,222	34,636,098	35,019,205	69,655,303	389,352,919
1925-26	35,019,205	402,296,000	1,872,242	439,187,447	33, 292, 917	45,240,877	78,533,794	360,653,653
1926-27	45,240,877	383,416,000	1,833,369	430,490,246	6,676,977	23,045,449	29,722,426	400,767,820
1927 -28	27,045,449	439,713,000	3,092,999	465 853 448	12,168,037	28,604,960	40,772,997	425,078,451
1928-29	28,504,950	452, 153, 000	3,036,756	483,794,716	12,828 385	44,950,270	57,778,655	426,016,061
1929-30	44,950,270	282,838,000	3,725,948	331,514,118	2,000,281	21, 582,780	23,583,061	307,931,157
1.930-31	21,582,780	423,148,000	1,349,245	446,080,025	7,822,022	63,431, 989	71,254,011	374,826,014
1931-32	63,431,989	328,278,000	1,577,480	393,287,469	13,611,111	29,972,324	43,583,435	349,704,034
TOTALS	405,167,506	5,129,998,000	19,729,349	5,554,894,855	239,974,880	425,458,913	665,433,793	4,889,461,062

<sup>#</sup> Imports on Fiscal Year Basis.

<sup>/</sup> Including the factor of error in crop estimates.

The foregoing table shows the disposition of Canadian oats production from 1920-21 to 1931-32. Several important observations may be based upon the data included in the table.

- l. It will be noted that out of a total production of 5,129 million bushels during the past twelve years, only 240 million bushels have been exported or about 5 per cent. In other words, during the past twelve crop years 95 per cent of Canadian production of oats has been consumed in Canada or held as reserves.
- 2. The table shows a sharp falling off in exports of oats from Canada in 1926-27 and succeeding years. From 1920-21 to 1925-26 exports of oats averaged 31 million bushels per year while for the six-year period from 1926-27 to 1931-32 exports averaged 9 million bushels per year.
- 3. The table shows that there has been no tendency toward increased carry-overs in recent years. The average carry-over of oats in Canada from 1920-21 to 1925-26 was identical with the average carry-over from 1926-27 to 1931-32, the average being 35 million bushels in each case.
- 4. The table reveals the fact that the volume of domestic consumption and the volume of year—end stocks are closely related to the volume of production. This point may be illustrated by reference to the following table showing the change from year to year in production, year—end stocks and domestic consumption.

	Crop	Year-end Stocks	Domestic Consumption
		(million	bushels)
1920-21	≠ 137	≠ 35	≠ 77
1921-22	- 105	29	- 41
1922-23	≠ 65	≠ 6	≠ 35
1923-24 1924-25 1925-26	73 - 158 - 4	≠ 30 - 17 ≠ 10	≠ 33 - 107
1926-27	- 19	- 22	- 28
1927-28	/ 57	- 6	<del>/</del> 40
1928-29	/ 12	- 16	<del>/</del> 24
1929-30	- 169	23	- 118
1930-31	/ 140	4 41	- 67
1931-32	- 95	- 33	- 25

The foregoing figures show clearly that increases or decreases in the volume of production of oats are generally followed by increases or decreases in domestic consumption and year-end stocks. This tendency is especially marked where a large increase or decrease takes place in production from one year to another.

Exceptions are noted in 1925-26 and 1926-27 but in these years the change in the volume of production was not marked. There is evidence to support the view that the volume of consumption of oats in Canada depends largely upon the volume of production. As a rule a large crop means heavy consumption and a small crop means reduced consumption. In addition there is a tendency to build up reserves in years of large production and reduce reserves in years of small production.

5. It will be noted that there has been a tendency toward decreased consumption of oats in Canada in recent years. The following table shows average production and average consumption by four-year periods since 1920-21:

	Average Production (million)	hushels)		
1920-21 to 1923-24 1924-25 to 1927-28	502 407	463 394		
1928-29 to 1931-32	371	365		

Considering each of the four-year periods it will be seen that production of oats in Canada has decreased. This decrease may be due to either smaller yields per acre or a smaller acreage. The high average production from 1920-21 to 1923-24 is due in part to the fact that acreage sown to oats reached its peak in 1921 when 16,949,000 acres were sown. In addition in 1920 a high yield of 33.5 bushels per acre was harvested on 15,850,000 acres.

During the four years from 1924-25 to 1927-28 acreage sown to oats averaged over 2 million acres less than during the preceding four years. The fall in production, therefore, between 1924-25 and 1927-28 as compared with the preceding four-year period is due largely to a reduction in sown acreage, and to a lesser extent to reduced yields per acre. The falling off in exports was responsible for the fact that domestic consumption did not decrease to the same extent as production.

During the four years from 1928-29 to 1931-32 acreage sown to oats averaged only slightly lower than from 1924-25 to 1927-28, and the reduction in production in the more recent period is due largely to lower yields per acre. From 1928-29 to 1931-32 consumption figures decreased along with production, but not quite to the same extent.

Many causes have contributed to the reduced consumption of oats in Canada in recent years. One of the most important factors in the decline has been the introduction of power machinery in Western Canada. During the years 1924 to 1928 or 1929 the tractor displaced the horse to a considerable extent especially in regions where oats are not considered a favourable crop. The tractor not only displaced the horse from the farm, but in many cases relegated the horse to a pasture diet.

The Decennial Census returns indicate the trend of live-stock numbers in Canada and a reference to horse population is relevant to the present discussion. Between 1921 and 1931 the number of horses on farms in Canada decreased from 3,451,769 to 3,129,058, or a reduction of 322,711 horses. It is likewise probable that the number of horses resident in cities has also decreased in recent years owing to the mechanization of delivery systems.

The use of oats in Canada has, no doubt, been affected by the increase of feeding of barley to livestock in efforts to promote the use of barley as a feeding grain. In a Barley study issued by the Dominion Bureau of Statistics in 1935, it is pointed out that "On the whole figures show that the use of barley increased substantially during the twelve-year period" (1920-21 to 1931-32).

It is probable also that the production of oats in Canada has suffered from the competition of barley, the latter crop having such a wide range of uses and the choice of several markets.

## USE OF OATS IN THE MILLING INDUSTRY. 1/

Oats are used by the milling industry in the production of three main products, namely, oatmeal, rolled oats and mixed feeds.

#### Oatmeal

The production of oatmeal in Canada is shown in the following table:

	Pounds	Value
1927	9,968,490 15,861,456 9,712,763 9,596,428 21,140,273	\$ 349,302 528,708 314,306 339,703 464,802

#### Rolled Oats

The production of rolled oats is shown as follows:

Pounds	Value
1927 116,754,330	 ,591,765
1928	,521,023
1929 140,498,011	,588,563 ,871,383
1930	,224,467
1901 0000000000000000000000000000000000	

#### Total Consumption

The consumption of oats by the milling industry in Canada is shown in the following table:

		Bushels	Value
1.927	690000000000000000000000000000000000000		\$ 8,755,308
1928	0 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	16,454,979	9,821,736
	000000000000000000000000000000000000000	16,287,894	8,974,731 7,537,754
	000000000000000000000000000000000000000	14,225,749	5,155,891
1931	000000000000000000000000000000000000000	15,748,075	9,100,001

In addition, the milling industry uses considerable quantities of mixed grains for the production of feeds. On the basis of an oats content of 40 per cent in mixed grains, the following quantities of oats were consumed in this manner.

		Bushels	Value
1.927	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		\$ 8,696,571
1928	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	13,177,114	8,096,865
	0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	12,697,851	8,032,146 6,581,045
	000000000000000000000000000000000000000	12,210,324	4,989,130
1931	000000000000000000000000000000000000000	13,192,651	4,505,100

On the basis of the foregoing figures it is apparent that the milling industry in Canada utilizes about 28 million bushels of oats annually or for the five-year period outlined above, about 7 per cent of Canadian production.

<sup>1/</sup> Data by General Manufactures Division of the Dominion Bureau of Statistics.

#### Prices of Oats

The following table shows monthly average prices for No. 3 C.W. oats at Winnipeg from 1920-21 to 1932-33 (to date). The prices are cash prices basis in store at Port Arthur and Fort William:

Monthly Average	Cash Prices	for No.	3 Cowo	Oats at	Winnipeg,	1920-21	to 1932-33.
-----------------	-------------	---------	--------	---------	-----------	---------	-------------

	1920-21	1921-22	1922-23	1925-24	p) 1924-25	92-526T	27-9361 ber bus	(1927-28	1928-29	1929-30	1930-31	1931-32	1952-33
August	1.41	.48	.41	.44	.53	.50	.44	。61	,49	. 65	. 37	.25	.28
September	.79	.45	.42	.43	.57	.44	.49	。60	.52	. 65	.31	.24	.23
October	.67	. 39	.40	. 39	.60	.43	.56	.59	.53	。63	.30	.28	.21
November	.56	.41	.42	. 37	.55	.44	.57	.56	.53	。60	.25	.31	.22
December	.51	.40	.42	. 34	.59	.44	.53	.58	.52	.57	.24	.27	.18
January	.48	.40	.42	.37	. 62	.43	.52	.58	.58	.52	.23	.27	.22
February	.45	.45	.44	. 38	.59	.42	.52	.59	.64	.51	.25	.27	.22
March	.44	.45	.44	.35	.49	.42	.53	. 64	.56	.47	.25	.27	.22
April	.39	.46	.48	. 35	.46	.48	.53	。69	.52	.49	. 25	.30	.23
May	.41	.51	.46	. 37	.56	.46	.59	.73	.48	.47	.26	.33	.26
June	.44	.50	.46	.40	.59	.45	。61	. 62	.48	.45	.27	.32	
July	.48	. 48	.44	.46	.53	. 45	. 63	.55	。60	.41	.26	.32	
AVERAGE	.90	.45	.43	.39	.56	.45	.54	. 61	.54	.54	.27	.29	

#### Prices for Oats in Eastern Canada

The following page contains a long-time series of prices for oats in Toronto. The series extends from 1890 to 1933 (to date) and represents prices for good, sound, heavy oats. Monthly average prices are shown.

## Oats Prices in Ontario (Toronto) - Good, Sound, Heavy Oats, 1890 to 1933.

r ett, tille attille i til ne i alle evinner	-		-					, 2000	OO TOO		
	1890	1891	1.892	1893	1894	1895	1896	1897	1898	1899	1900
January	31	.45	31	.27	.31	.28	.23	.20	.25	.30	hard prompt in the co
February	,29	.46	. 32	.29	.32	.29	.24	.17	.28	.29	.26
March	30	.45	. 29	. 31	. 33	.34	.23	.19	. 30	.31	.27
April.	.29	.55	29	. 30	. 33	. 37	,22	.21	. 30	.30	.28
May	.38	.51	.29	. 32	. 33	. 35	.21	.20	. 35	. 32	.28
June	.43	.47	31	.34	.36	.40	.20	.20	.34	. 30	.27
July August	.41	.50	. 29	. 36	40	. 38	.1.8	.23	.25	。30	.28
September	. 50 . 39	. 43	. 31	. 36	.33	. 31	,19	.22	.26	.28	.28
October	.41	.28	.33	. 31	.26	.23	.19	.21	.23	. 25	. 26
November	.41	.32	,27	. 29	.26 .27	-23	.19	.22	.24	. 28	- 25
December	43	.31	.27	. 29	.28	.24	。21 。20	.23	. 26	. 27	25
Average	. 38	.42	.29	.31	, 31	.30			. 27	. 28	.27
	1901	1902	1903	1904	1905	1906	.21	.21	28	.29	. 27
January	ber i sheupe vo. c	4 August or Ogrania	and the same of th	alle vissence di Servi si	Company of the last	-	1907	1908	1909	1910	1911
February	.27	.42	. 32	,30	. 33	. 35	. 36	.46	.39	.36	, 33
March	.30	.42	33	. 32 . 35	.37	.35	。37 。40	.50 .52	.42	. 39	. 33
April	30	.42	. 31	32	,41	35	. 39	.47	.45	.39 .37	.32
May	. 31	.44	.30	. 31	.41	.37	.40	.46	,46	. 35	. 37
June	. 33	.46	. 33	. 33	.43	. 38	.47	.49	.60	.34	.37
July	。30	.44	. 33	. 33	.46	- 40	.45	.45	.58	. 33	.39
August September	.34	.45	32	. <b>54</b> . <b>3</b> 5	.44	. 37	.44	.45	.54	.41	.40
October	. 35	.30	30	.32	.31	35	.49	.40	. 45	.37	.45
November	.41	.31	.31	. 32	.34	. 36	.54	.38	.37	.32	.47
December	- 46	. 31.	.29	.33	.36	.37	.48	.40	. 37	. 34	.47
Average	. 33	.40	.31	.32	. 38	.36	.44	.45	.45	. 36	, 39
	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
January	.46	. 38	.39	. 51	.42	.65	.85	.70	.98	.52	. 35
February	.48	。38	.39	63	.43	.64	.94	.60	1.00	.48	.42
March	.49	, 37	.41	,61	.42	566	.96	。64	1.02	.45	.43
April May	.51 .51	.37	.43	.6l	044	.72	.92	.71	1.05	.43	.43
June	51	.37	.44	. 6J . 56	.47	.75 .78	.82	.75	1.08	.43	.43
July	.48	38	.43	59	48	.82	.85	.83	1.10	.43	.42
August	.44	38	.50	· 55	.51	.74	.80	.89	.82	.46	642
September	.46	37	51	.39	.53	。60	.77	.89	.75	.43	, 35
October November	.42	。36 。37	.46	- 38	.57	63	.77	.85	. 68	.41	,40
December	.38	38	.48	38 38	.66	.70	.77	.87	1.15	。39 。39	.43 .42
Average	46	. 37	, 44	.52	و50	.71	.83	.79	1.,00	.46	.41
	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
January	44	.40	55	.44	.56	.59	.49	.51	.28	.22	.21
February	. 48	.42	59	.43	.55	.61	.53	.51	.27	.24	.23
March	.49	.42	.47	. 42	.55	。66	.53	.51	.28	.26	.26
April	. 50	.40	.43	.43	.51	.70	。53	.52	.27	.27	.27
May June	.52	40	.48	45	53	.72	.54	.45	.26	. 28	.29
July	47	.40	.50 .50	.45	.55 .56	.73	.47	.45	.25	.29	
August	42	.40	.48	.44	.53	.41	.46	.45 .32	.24	. 30	
September	.42	.50	. 38	.43	.50	.44	.46	.30	.20	.27	
October	.43	54	. 38	.47	.53	50	.63	.29	.21	.23	
November	.41	.52	.41	49	.55	- 50	. 60	.29	040	o i. i.	
December	.39	51	.43	. 52	. 57	.49	. 51	.29	026	011	
Average	, 47	. 44	.48	. 45	.54	. 60	.53	.40	.25	.25	

## The Export Market

The development of Canadian export trade in oats is indicated in the following tables showing exports since 1868. The following table shows exports of oats from Canada from 1868 to 1913:-

		to the same of the	Quantities			
Fiscal	United	United	Other	Totals		
Year	Kingdom	States	Countries			
		( Bush	hels)			
0.00	927,642	776,720	34,079	1,738,441		
L868		271,337	60,208	762,620		
1869	431,075	1,973,466	25,782	2,187,547		
L870	188,299	420,906	31,430	542,386		
1871	90,050	416,149	23,574	485,976		
L872	46,253	197,141	21,207	629,467		
1873	411,119	138,125	71,321	998,100		
1874	788,654	1,350,692	114,499	2,989,839		
1875	1,524,648	88,372	571,287	2,644,23		
L876	1,984,574		201,203	2,970,28		
1877	2,696,703	72,378	138,869	2,340,06		
1.878	2,181,815	19,378	454,367	2,373,29		
1879	1,909,983	8,940	1,202,962	4,717,00		
1880	3,032,940	481,138	367,794	2,926,53		
1881	2,504,331	54,407	511,140	4,146,95		
1882	1,839,710	1,796,104		1,024,05		
1883	129,117	607,953	286,983	1,346,72		
1884	901,069	22,985	422,666	2,359,00		
1885	1,866,221	94,971	397,810	4,149,98		
1886	3,280,787	240,159	629,042			
1887	1,627,629	40,342	380,269	2,048,24		
1888	177,194	25,182	364,345	566,72		
1889	2,568	16,789	31.7,828	337,18		
1890	454,090	27,530	276,172	757,79		
1891	16,528	2,264	241,777	260,56		
1892	5,743,720	165,947	504,662	6,414,32		
1893	6,261,258	63,300	949,348	7,273,90		
1894	1,738,666	63,342	1,016,694	2,818,70		
1895	257,253	175,043	494,679	926,97		
1896	487,252	45,320	435,565	968,13		
1897	5,409,808	43,470	1,093,603	6,546,88		
	8,143,107	65,574	1,667,782	9,876,46		
1898 1899	8,977,646	129,954	1,205,392	10,312,99		
	6,028,704	137,785	762,725	6,929,23		
1900		63,446	1,480,221	8,155,00		
1901	6,611,396	137,081	1,348,368	5,030,13		
1.902	3,544,674		1,849,359	7,593,17		
1903	5,623,116	120,702	898,266	4,695,2		
1904	3,607,938	189,037		2,367,4		
1905	1,617,310	78,533	671,656	2,700,3		
1906	1,885,166	152,602	662,535			
1907	3,853,295	125,188	560,953	4,539,4		
	5,617,102	350,991	1,155,198	7,123,2		
1908	2,588,995	1,554,251	1,112,364	5,255,6		
1.909		1,285,660	1,091,579	3,401,7		
1910	1,024,491	128,538	1,274,378	5,431,6		
1911	4,028,746		1,662,470	8,880,6		
1912	7,014,645	203,560	1,458,970	10,478,5		
1913	7,293,004	1,726,580	7.9400,010	,,-		

The foregoing table is of historical nature and shows the rather spasmodic nature of exports throughout the period of time covered. Exports were small until 1892 when 6,414,329 bushels were cleared followed by 7,273,906 bushels in the following year. In 1898 exports increased to 9,876,463 bushels and in 1899 exports exceeded 10 million bushels. Between 1899 and 1913 exports of oats varied widely and reached a high point in 1913.

The following table shows exports of oats from 1914-15 to 1931-32 (crop year basis):

		(Bushels)
1914-15	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	13,381,579
1915-16	00000000000000000000000	62,423,515
1916-17	00000000000000000000000000	64,468,389
1917-18		28,207,183
1918-19	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23,479,351
1919-20		15,355,933
1920-21	« 0 4 0 9 8 9 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28,714,482
1921-22	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	27,038,248
1922-23	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23,561,178
1923-24	0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37,625,144
1924-25	000000000000000000000000000000000000000	34,636,098
1925-26	000000000000000000000000000000000000000	33,292,917
1926-27	000000000000000000000000000000000000000	6,676,977
1927-28	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12,168,037
1928-29	0 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12,828,385
1929-30	000000000000000000000000000000000000000	2,000,281
1930-31		7,822,022
1931-32		13,611,111

The above table shows the course of Canadian exports of oats from 1914-15 to 1931-32. The figures indicate the extent of the movement of oats out of Canada during the first two years of the war when exports amounted to 62 and 64 million bushels. This large export movement did not last however and from 1917 to 1926 exports ranged from 15 million bushels to 38 million bushels per crop year.

In 1926-27 exports dropped sharply as compared with previous years and have remained at a low level ever since.

Exports of oats from Canada during 1932-33 have remained on about the same level as during 1931-32. For the eleven months ending June 1933, exports amounted to 10 million bushels.

In dealing with the general question of Canadian exports of this cereal, several factors must be borne in mind. In the first place oats are produced in Canada primarily for farm consumption. During the six years from 1920-21 to 1925-26, when exports of oats were relatively high, exports only amounted to about 7 per cent of annual production. During the six years from 1926-27 to 1931-32 exports of oats amounted to less than 3 per cent of annual production. These figures indicate clearly the predominate use of oats as a feed grain. To maintain a large export movement, therefore, prices have to be such as to attract oats from the farm.

In the second place total world trade in oats amounts to about 100 million bushels annually and the market is divided among nine important competing countries. These countries are Germany, Roumania, Russia, Czechoslovakia, the Argentine, Chile, Irish Free State, United States and Canada. In view of the moderate proportions of world trade in oats, the extent of shipments from any one exporting country must be moderate, especially when crops are average or better in all exporting areas.

#### Markets for Surplus Oats

As pointed out previously, only a small percentage of world production of oats moves into international trade. With world production ranging between 4 to 5 billion bushels per annum, world trade in oats only amounts to about 100 million bushels per year, or slightly over 2 per cent of world production.

One of the chief markets for cats is the United Kingdom. The extent of the British market and the origin of its supplies are indicated by the following table showing imports of cats into the United Kingdom from 1926 to 1930 by countries of origin.

	1926	1927	1928	1929	1930
			( bushe	ls )	
Russia	92,000	903,000	ency	76,000	9,083,000
Sweden	19,000	185,000	6,000	91,000	1,000
Poland	508,000	97,000	73,000	269,000	437,000
Germany	1,043,000	498,000	3,733,000	8,197,000	10,065,000
Netherlands	44,000	113,000	35,000	23,000	125,000
Belgium	31,000	83,000	203,000	6,000	7,000
Algeria	400		236,000	704	699
Roumania		83,000	13,000	33,000	405,000
United States	3,298,000	1,119,000	2,890,000	644,000	139,000
Chile	3,349,000	2,660,000	2,520,000	1,980,000	1,899,000
Argentine	8,570,000	7,272,000	5,378,000	6,178,000	7,362,000
New Zealand	194	59,000	222,000		
Canada	6,266,000	1,742,000	5,531,000	2,988,000	679,000
Irish Free State	1,842,000	4,579,000	3,434,000	2,145,000	1,257,000
Others	103,000	65,000	205,000	197,000	266,000
Total	25,165,000	19,458,000	24,531,000	22,827,000	31,725,000

The above table shows that during the five years from 1926 to 1930, the United Kingdom imported about 25 million bushels of oats per year on the average. During the same five years the United Kingdom produced an average crop of 162 million bushels. On this basis imports amounted to about 13 per cent of total requirements of this grain.

Referring to the foregoing table, it will be noted that during the five years from 1926 to 1930, the Argentine has been the largest and most consistent source of supply for the United Kingdom. Other countries interested in exporting oats to the United Kingdom do so in small quantities or in volume fluctuating greatly from year to year. Among the countries which export in widely varying quantities to the United Kingdom may be listed Canada, the United States, Russia, Germany, and the Irish Free State.

As far as Canada is concerned British import figures may not truly reflect the actual position. Comparing British import figures and Canadian export figures, the differences are not large as shown by the following table:

# British Imports from Canada Canadian Exports to the United Kingdom (bushels)

1.926	6,266,000	9,447,000
1927	1,742,000	1,881,000
1928	5,531,000	6,728,000
1929 000000000	2,988,000	2,816,000
1930	679,000	609,000
1951	4,266,129	5,063,000
1932	3,157,890	8,455,000

Theoretically British import figures and Canadian export figures for oats are subject to the same type of error as exists in the case of wheat and barley. As the margin of error is small, however, the situation in regard to oats does not warrant a calculation of possible discrepancies. Luring the seven years from 1926 to 1932 the United Kingdom imported an average of 4,233,000 bushels of oats from Canada according to British trade returns. During the same seven years, Canadian trade returns show average exports of about 5,000,000 bushels to the United Kingdom. Without endeavouring to be too specific on the point, it is probable that actual exports of Canadian oats to the United Kingdom amounted to slightly more than shown by the British trade returns and slightly less than shown by Canadian trade returns.

During the past seven years the United Kingdom has imported an average of 23.4 million bushels of oats per year. The Canadian share of this trade may be estimated at about 4.6 million bushels or slightly over 20 per cent of total imports into the United Kingdom. During the past seven years, Canadian exports of oats have averaged 11.1 million bushels per year. Consequently it would appear that the United Kingdom has absorbed slightly over 40 per cent of total Canadian exports of oats during the seven years under consideration.

During the past year Canada supplied a large share of British imports of oats. The following table shows imports of oats into the United Kingdom by countries of origin in 1931 and 1932:

	1931	1932
	(bush	els)
Russia	9,167,000	372,000
Germany	87,000	286,000
Argentine ossessesses	12,071,000	10,395,000
Irish Free State	442,000	156,000
Canada	4,266,000	8,158,000
Others	2,800,000	1,938,000
	and the second section of the sectio	NE så stateredhettegggenederrane jagonde
Total	28,833,000	21,306,000
	CONTRACTOR CONTRACTOR CONTRACTOR	A STATE STATE OF THE STATE OF T

It will be noted that Russia took slightly over one-third of the British market for oats in 1930 and 1931 but in 1932 Russia only shipped 372,000 bushels to the United Kingdom. As a result of this situation, Canadian exports of oats to the United Kingdom increased sharply in 1932 although total imports into the United Kingdom decreased as compared with 1931. During the past two years Germany has played an unimportant part in the British market. In 1929 and 1930, German exports of oats to the United Kingdom amounted to 8 and 10 million bushels respectively.

It is interesting to note that in 1930 the United Kingdom imported 19 million bushels of oats from Russia and Germany, or about 60 per cent of her total imports of this grain. In 1932 these two countries supplied about 3 per cent of total imports into the United Kingdom. The above figures indicate the degree of change which may take place in a market for agricultural products in a comparatively short time and explain why Canadian exports of oats have fluctuated widely in recent years.

Dealing with the nature of the demand for oats in the United Kingdom, the Ministry of Agriculture and Fisheries states:-

"Millers regard a tough, plump, thin-skinned oat, rich in protein and not over-starchy, as being the most suitable, since it yields the best type of oatmeal for human consumption and behaves satisfactorily in the process of milling. It cuts better into meal, does not break down into flour too readily and gives a richer and better flavoured product than other types. Home-grown oats from the north and west have these characteristics in a high degree. In the mill, however, it is nearly always necessary to kiln-dry homegrown oats in order to facilitate shelling and milling. As kiln-drying is an expensive process and since home grown oats are almost unobtainable at certain times of the year, many oatmeal millers consider that imported oats answer their requirements better than the home-grown article. For a time, New Zealand oats, as having a close resemblance to home-grown oats, were favoured, but, more recently, Canada Western have been chiefly employed. Some millers regard Argentine and Chilean oats as suitable for this purpose. Many provender millers, who manufacture products such as "Sussex Ground" oats, where the whole grain is crushed, also show a preference for the drier type of imported grain-Canada Western for choice.

"Regarded as a feeding stuff for use in their natural state, imported oats compare unfavourably with home-grown in palatability and feeding value. No oats in the world meet the requirements for general stock-feeding better than those grown at home.

"Among home-grown types of oats, the market makes certain broad distinctions of quality on the basis of colour, some of which are justifiable and some not. White oats are preferred by millers and, of these, the thin-skinned varieties are better suited to milling than the thick-skinned. Yellow or golden varieties are not favoured by poultry-food merchants as they are suspected of being discoloured whites. Owners of collieries and, more recently, owners of hunting stables have begun to appreciate the good quality to be found in a coloured sample, although grey oats are, as a rule, less popular for horse-feeding than an all-black sample. It is not always necessary or desirable, therefore, for farmers to follow the practice observed in some districts of selling their white oats and retaining black oats for consumption on the farm.

"While the varied character of the supplies produced and of those available in each district has a distinct bearing on the distribution of the crop, the effect is, on the whole, local. Prices from different districts do not give any great indication of quality differences between one part of the country and another.

"Apart from supplies retained on farms, the total market requirement may be estimated roughly as:- for horse-feed 850,000 tons, for oatmeal 200,—000 and for poultry 125,000 tons, a total of approximately 1,175,000 tons. A few farmers buy cheap imported oats and sell their own, but the practice is not general, so that, apparently, even after imported oats are disposed of, there is a potential market demand for approximately one-third of the home crop of Great Britain and Northern Ireland.

"The production and consumption of oatmeal are greatest in the north of England and Scotland, but there are only a few mills of importance on this side of the border. The total amount of oatmeal, groats and rolled oats manufactured in Great Britain and Northern Ireland in 1924 may be estimated at 136,000 tons, which represents, on the basis of a 70 per cent. extract, roughly 200,000 tons of oats. The quantity of crushed and "Sussex Ground" oats, milled for poultry and animal foods, appears to be increasing owing to the greater numbers of poultry which are kept, and may be estimated, on a conservative basis, as about 125,000 tons per annum.

"Oats are in greatest market demand as feed for horses. Railway companies and haulage contractors employ a large number of draught animals, so that busy centres, such as London, the West Riding of Yorkshire and south Lancashire, still offer an important outlet. Large numbers of ponies are still used in the coal mines in South Wales, Durham and the West Riding and, particularly, in the Midland counties of Derby, Stafford and Nottingham. The hunting counties, notably Leicester, Gloucester, Northampton, Warwick and Devon, and counties such as Yorkshire, with large racing stables, still show a strong demand for home-grown oats. The total market requirements for oats as horse-feed are estimated to be between 800,000 and 900,000 tons per annum apart from supplies retained on farms. It is not likely that market requirements will show any great variation from one year to another, although the tendency is doubtless for the demand to fall off with the decline in the horse population. On the other hand, there has, of late, been a very marked increase in poultry population and it is reasonable to assume that the total market requirements for oats for feeding purposes have not declined to anything like the extent suggested by the reduction in the number of horses in the country. It should be noted that there is a growing tendency to employ oats for the feeding of all kinds of farm stock and, therefore, for relatively smaller quantities of oats to be placed on the market.

"The seasonal demand for oats is not capable of any precise measurement but, since many horses are put to grass during summer, the demand is probably greatest during the winter. Prior to Christmas, however, there is a marked disinclination in many quarters to use new oats as horse-feed. The demand from oatmeal millers is maintained throughout the year." (1)

#### Other Markets for Oats

Continental Europe affords a market for surplus oats and apart from the United Kingdom constitutes the only market of importance. Belgium, Denmark, France, Italy, the Netherlands, Sweden, Austria and Switzerland are the leading importing countries of continental Europe. For purposes of the present discussion, these countries may be treated as a group. The following table shows average production, average imports and average consumption of oats from 1927 to 1931:

<sup>(1)</sup> Report on the Marketing of Wheat, Barley and Oats in England and Wales. Economic Series No. 18. (1928).

	Average Production	nverage Imports (million bushels)	Average Consumption
Belgium	44.3	7.6	51.9
Denmark	64.5	3.5	68.0
France	324.5	5.0	329.5
Italy ossessessesses	39.2	7.6	46.8
Netherlands	21.3	8.2	29.5
Sweden	73.9	3.1	77.0
Switzerland	2.6	11.2	13.8
austria	27.5	5.9	33.2
Total	597.6	52.1	649.7

The foregoing countries constitute the chief importing markets of continental Europe, taking an average of 52.1 million bushels of oats during the five years from 1927 to 1931. It will be noted that imports amount to about 9 per cent of total production. Switzerland is the only country listed above which normally imports more oats than are produced domestically.

Germany imports oats in varying amounts each year but exports exceed imports as a rule. In the five years from 1927 to 1931 Germany imported 40 million bushels of oats and exported 87 million bushels and was therefore, on balance, a substantial exporter.

The balance of world imports of oats is taken by a larger number of countries which import in very small volume but in aggregate account for annual imports of from 10 to 20 million bushels.

Four main characteristics are noticed in the international cats market. In the first place the market consists, in the main, of numerous demands for relatively small quantities of cats to supplement domestic production. Imports constitute a small proportion of total consumption. In the second place the European market depends largely upon how far Europe (including hussia) can supply her own needs. If hussia and Germany have surpluses of cats, the demand from North America is restricted. If these countries are out of the market, the demand is improved. This factor has tended to cause wide fluctuations in the volume of cats moving from North America to the European market. In the third place, cats are a bulky commodity and low prices tend to restrict movement both domestically and internationally. Fourthly, cats are a feed grain and consequently must bear the degree of competition that exists in the feeding industry.

## WORLD PRODUCTION AND TRADE IN OATS

#### Acreage and Production

The following table shows the acreage sown to oats in the leading producing areas (excluding Russia and China) for the five-year period from 1924 to 1928 and for the four years from 1929 to 1932.

#### World Production of Oats

The distribution of world oats acreage and production is shown in the following tables: X

#### Oats Acreage

#### EUROPE

	Average 1924-28	1929	1930	1931	1932
		(Th	ousand Acre	s)	
Germany	8,623	8,793	8,499	8,310	8,118
Austria	763	733	772	777	784
Belgium	660	744	674	729	712
Bulgaria	335	387	345	293	281
Denmark	1,060	968	958	937	983
Spain	1,834	1,840	1,940	1,986	1,926
Estonia	365	371	368	367	356
Irish Free State	660	666	644	623	623
Finland	1,093	1,138	1,137	1,149	1,119
France	8,582	8,665	8,557	8,564	8,418
United Kingdom	3,093	3,057	2,947	2,773	2,730
Greece	263	337	359	344	367
Hungary	680	745	608	596	575
Italy	1,221	1,293	1,262	1,146	1,113
Latvia	755	747	790	795	802
Lithuania	815	865	855	900	931
Luxemburg	71	77	70	75	74
Norway	239	239	239	237	235
Netherlands	373	396	370	369	350
Poland	4,889	5,416	5,404	5,367	5,486
Portugal	539	519	429	422	422 +
Roumania	2,817	2,997	2,686	2,154	1,956
Sweden	1,796	1,744	1,629	1,590	1,577
Switzerland	50	51	48	45	41
Jzechoslovakia	2,059	2,150	2,049	2,031	2,020
Yugoslavia	919	983	1,037	936	810
TOTAL	44,554	45,921	44,676	43,515	42,809
	NORTH	AMERICA			111111111111111111111111111111111111111
Canada	13,233	- Marian Company of the Company of t	12 050	10 021	77 740
Inited States		12,479	13,259	12,871	13,148
	42,968	40,043	39,729	39,800	41,224
TOTAL	56,201	52,522	52,988	52,671	54,372
	ASIA				
Syria	41	28	28	27	28
TOTAL	41	28	28	27	28

x Data from the International Institute of Agriculture. ≠ 1931 figures,

#### AFRICA

	Average 1924-28	1929	1930	1931	1932
		(Thou	sand Acres )		
Algeria	601	639	638	557	504
French Morocco	57	116	103	60	63
Tunis	101	96	124	67	86
TOTAL	759	851	865	684	653
	SOU	TH AMERICA			
Uruguay	136	205	179	148	135
Argentine	2,022	2,160	3,937	3,470	3,652
Chile	160	243	193	166	174
TOTAL	2,318	2,608	4,309	3,784	3,961
		SUMMARY		•	
Europe	44,554	45,921	44,676	43,515	42,809
North America	56,201	52,522	52,988	52,671	54,372
As1a	41	28	28	27	28
Africa ,	759	851	865	684	653
South America	2,318	2,608	4,309	3,784	3,961
TOTAL	103,873	101,930	102,866	100,681	101,823

The foregoing table shows that the world acreage of oats is largely distributed between Europe and North America, the latter exceeding the former by about 12 million acres. Acreage outside of North America and Europe is relatively small. From a trade standpoint, however, the oats acreage of the Argentine is highly important as a source of supply for the United Kingdom.

No pronounced trend in oats acreage is noticed in recent years. Some countries in Europe are increasing the area devoted to oats while other countries are reducing the area sown to oats. Taking Europe as a whole, 1932 acreage amounted to 42.8 million acres which compared with 43.5 million acres in 1931 and 44.6 million acres for the five-year period from 1924 to 1928. These acreage figures would indicate a downward swing in the area sown to oats. Perhaps the most important contraction in the acreage sown to oats has taken place in Germany where the area devoted to this cereal has decreased from 8.6 million acres from 1924 to 1928 to 8.1 million acres in 1932. This reduction in Germany is due, in a measure, to official policy which has been directed towards reducing the area sown to oats (where a national surplus exists) and increasing the area sown to wheat and barley (where national deficiencies exist). A marked decrease in oats acreage has taken place in houmania where the area sown to oats in 1932 amounted to 2.0 million acres as compared with an average of 2.8 million acres from 1924 to 1928. This reduction is probably due in part to the competition of Russian oats in 1930 and 1931. Increased areas sown to oats however are found in Poland, Latvia and Lithuania.

In North America the acreage devoted to oats has remained relatively constant in recent years, amounting to 54 4 million acres in 1932 compared with 56.2 million acres from 1924 to 1928. A slight reduction has taken place in the United States.

The area sown to oats has increased rapidly in the Argentine in recent years. During the five years from 1924 to 1928 the area sown to oats averaged 2.0 million acres. By 1930 this area had increased to 3.9 million acres and in 1932 amounted to 3.7 million acres.

#### Production

The following table shows production of oats in the leading producing areas for the five-year period from 1924 to 1928, and for the four years from 1929 to 1932.

	Average 1924-28	1929	1930	1931	1932
		( Thous	and bushels	)	
ermany	425,842	508,636	389,690	427,482	458,160
ustria	28,326	31,074	27,606	22,877	31,312
elgium	46,413	51,488	38,223	48,384	52,385
ulgaria	6,674	9,416	7,616	7,060	7,777
enmark	64,640	71,276	68,725	64,448	72,339
	37,060	45,812	49,995	41,670	57,218
pain occoococococo	8,223	10,277	10,870	11,296	8,966
sthonia	42,158	48,257	44,250	36,457	36,457
rish Free State	39,604	37,968	41,458	45,886	45,539
inland	336,168	395,755	302,749	316,288	353,383
rance occoposoco	168,459	179,462	158,556	146,160	159,993
nited Kingdom	4,680	3,251	5,991	5,274	6,200
reece	23,218	28,292	17,999	13,368	19,51
ungary		48,261	36,828	39,467	41,80
taly	40,524	23,433	23,537	23,611	22,25
atvia	1.6,171		26,871	28,065	24,94
ithuania	19,064	30,235	2,750	2,721	3,51
uxemburg	2,744	3,617	13,621	9,494	13,28
orway	12,059	12,146	20,454	19,784	20,91
letherlands	21,934	25,777		159,109	164,71
Poland	140,681	203,451	161,738	6,331	7,35
Portugal	5,582	5,571	7,778	46,175	44,27
ioumania	60,041	93,647	79,679		77,50
Sweden	79,670	88,239	79,058	69,767	2,34
Switzerland	2,860	2,894	2,659	2,308	
Czechoslovakia	92,574	102,927	91,101	84,368	114,62
lugoslavia	22,912	24,166	19,634	18,242	18,54
TOTAL	1,748,281	2,085,328	1,729,436	1,696,092	1,865,31
	1	NORTH AMERIC	4	elected, 3.1-3, amprophilities - 64). Appropriate a conference construction to	
		300,516	449,595	348,795	416,03
Canada	442,749		1,277,764	1,117,970	1,242,43
Jnited States	1,371,785	1,228,369	1,211,104	T 9 LLL 9 0 1 0	2,020,20
TOTAL	1,814,534	1,528,885	1,727,359	1,466,765	1,658,47

#### AFRICA

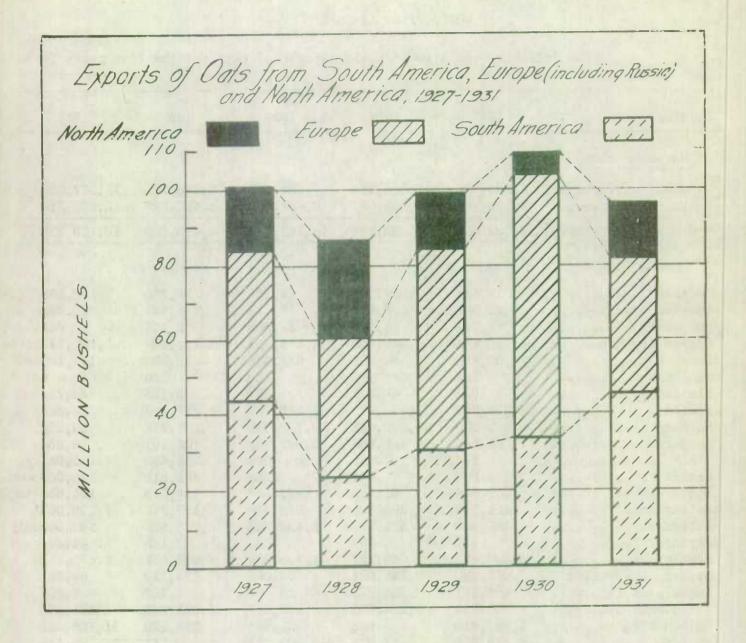
	Average 1924–28	1929	1930	1.931	1932
		( The	ousand Bushe	els)	
Algeria	11,739 1,363 2,039	14,786 3,413 3,445	16,561 2,357 2,067	8,212 1,660 2,274	7,096 1,591 1,929
T O T A L	15,141	21,644	20,985	12,146	10,616
		SOUTH AME	RICA		
Uruguay	2,574 63,526 5,702	3,877 68,294 10,403	3,440 49,604 5,109	3,107 69,280 4,923	3,107 / 86,118 4,923 /
TOTAL	71,802	82,574	58,153	77,310	94,148
		SUMMARY			
Euro, e	1,748,281 1,814,534 15,141 71,802	2,085,328 1,528,885 21,644 82,574	1,729,436 1,727,359 20,985 58,153	· ·	1,865,314 1,658,471 10,616 94,148
T O T A L	3,649,758	3,718,431	3,535,933	3,252,313	3,628,549

The foregoing table shows the widespread production of oats throughout Europe with exceedingly large production in Germany, France, Poland, Czechoslovakia and the United Kingdom. In spite of the fact that Europe (excluding Russia) produced 1,696,092,000 busnels of oats in 1931 exports from European countries (excluding Russia) only amounted to about 7 million busnels or .4 per cent. The European crop of oats is consumed to a very large extent in countries of production.

#### World Trade in Oats

The following table shows world exports of oats for the five years from 1927 to 1931:

ountry	1927	1928	1929	1930	1931
North America					
anada		16,036,984 10,155,078	7,681,471 6,487,780	2,765,211 1,650,297	11,177,066 2,225,326
OTAL	16,099,602	26,192,062	14,169,251	4,415,508	13,402,392
Europe					
ustria	13,422	7,334	4,636	13,779	3,365
elgium	28,083	5,512	7,723	9,947	10,323
ulgaria	12,716	14,979	39,275	2,334	642
zechoslovakia	4,414,445	4,546,658	4,535,953	3,713,168	1,002,464
enmark	80,366	159,558	277,448	39,587	157,100
sthonia	182	26	136	130	6
inland	42,991	47,277	11,587	3,125	49,715
rance	826,559	1,292,919	216,781	219,628	42,225
ermany conscious	6,851,008	20,800,443	32,789,090	26,277,772	59,908
ungary	1,689,754	522,688	2,083,587	702,191	18,564
taly	584	1,621	973	2,659	1,037
atvia	4,520	2,561	162	482,512	14,901
ithuania	6,808	61,419	60,563	624,393	105,680
etherlands	221,106	385,624	678,900	438,776	1,109,064
	473,953	· · · · · · · · · · · · · · · · · · ·	2,439,546	3,715,567	
oland	467	504,299 259	195		198,042
ortugal				1,75	44,644
oumania	5,790,997	1,060,757	2,705,899	6,098,557	2,478,017
weden socosososo	2,077,200	140,624	594,086	130,119	89,781
ugoslavia	464,161	305,939	26,488	5,427	4,228
rish Free State	4,706,132	3,289,876	2,165,347	1,241,959	426,066
nited Kingdom	1,950,810	509,966	951,458	918,519	1,169,031
ussia massadadada	6,459,016	24,575	509,272	22,858,243	25,097,445
OTAL occosoco	36,115,280	33,684,914	50,099,105	67,498,547	32,082,248
Australasia					
ustralia	151,705	82,616	94,002	178,582	199,708
ew Zealand	784,198	196,297	20,056	52,055	19,848
OTAL	935,903	278,913	114,058	230,637	219,556
South America					
rgentine oppossoo	39,218,499	19,433,494	27,895,071	29,414,983	41,804,194
ruguay	499		11,581	901	1,251
hile	4,519,165		3,024,794	3,830,915	3,934,261
			The second secon	-,,	-
OTAL DODOGOGO	43,738,163	23,298,840	70 077 446	33,246,799	45,739,706



The above chart shows exports of oats from the leading exporting areas during the five years from 1927 to 1931. It will be noted that exports from South America remained fairly constant during the five years. This situation arises from the steady movement from the Argentine and Chile. Exports from European countries are more variable and were exceptionally large during 1929 and 1930 when Germany and Russia played an important part in the market. Exports from North America varied widely during the five-year period. It will be noted throughout the five years that exports from the United States and Canada were exceedingly sensitive to the volume of exports from South America and from European countries in particular. In 1929 and 1930, Canadian exports were small due to large shipments from Germany and Russia. In 1931 European exports were smaller but this decrease was partially offset by larger exports from the Argentine.

The table on page 33 shows exports of oats from a large proportion of countries interested in this trade. It will be noted that total exports for the countries shown on page 33 ranged from 38 million bushels in 1928 to 110 million bushels in 1930. Average exports for the five-year period from 1927 to 1931 amounted to 98 million bushels. These statistics indicate that total exports of oats for the period considered were relatively stable.

While the total volume of oats entering international trade each year remained fairly constant, exports from individual countries varied widely. The most consistent element in the situation is undoubtedly the argentine with average exports of 31.5 million bushels per year from 1927 to 1931. Chile also exports consistently but in relatively small volume, exports ranging from 3.0 million bushels in 1929 to 4.5 million bushels in 1927. Exports from other countries, and particularly Canada and the United States varied widely throughout the five years shown in the table.

As Europe constitutes the chief market for oats, it is interesting to note how far the Continent is able to lock after its own needs. Exports from European sources ranged from 34 million bushels in 1928 to 67 million bushels in 1930. Average exports from European countries from 1927 to 1931 amounted to 44 million bushels. Imports of oats into Europe ranged from 82 million bushels in 1928 to 100 million bushels in 1930 and averaged 91 million bushels for the five-year period from 1927 to 1931. Europe is able to supply about one half of her requirements of oats and the balance has to be imported from Ex-European countries, mainly from the Argentine, Chile, Uruguay, Canada and the United States.

In 1927, 1928, 1929 and 1930 Germany was the largest exporter of oats in Europe, but in 1931 German exports were very small and Russia exceeded any other European country in exports of this grain. In 1930, Russia and Germany both shipped heavily with the result that European exports were large, amounting to 67 million bushels. It will be seen from the foregoing table that exports of oats from European countries vary widely. In years of large exports the movement from Canada and the United States is affected. The table reveals the fact that Canada and the United States are more sensitive to the supply situation in Europe than are the Argentine or Chile.

#### World Imports of Oats

The following table shows imports of oats into the leading importing countries for the five-year period from 1927 to 1931:

	1927	1928	1929	1930	1931
SERVICE CONTROL OF SERVICE CONTR	and the second second second second second second		(bushels)		72 <b>38.4</b> 9 -7 12 36.5 12 4 - 1 12 € 1
Austria	5,069,042	4,982,685	6,545,814	6,894,187	6,122,147
Belgium	5,961,610	7,084,129	8,400,955	10,150,585	6,646,599
Czechoslovakia	328,433	455,602	275,451	301,413	564,712
Denmark	1,764,641	1,965,730	3,435,752	7,152,888	3,422,032
Esthonia	384,716	850,583	968,441	337,472	409,992
Finland	82,817	924,186	1,751,730	992,244	710,031
France	3,861,313	2,735,383	8,504,43?	4,436,050	5,350,639
dermany ,	18,526,077	10,226,217	7,194,608	1,249,085	3,141,219
reece	41.3,863	115,698	429,944	282,849	1.36
Irish Free State	378,401	215,594	258,086	633,711	1,394,611
Italy	7,939,952	6,896,443	4,498,766	8,689,984	9,959,793
atvia	837,978	1,251,679	2,631,421	87,622	154,143
letherlands	6,649,880	6,237,139	8,760,662	10,271,380	8,896,766
Vorway	651,556	254,085	329,549	329,360	376,955
oland	3,192,840	1,705,452	435,443	61,308	370
Sweden	1,427,901	3,226,117	3,629,806	2,972,817	4,496,632
Switzerland	9,605,377	8,592,967	10,771,399	13,087,498	13,841,726
ugoslavia	23,680	67,008	45,040	358,047	40,267
Inited Kingdom	19,458,504	24,531,507	22,827,916	31,820,396	28,834,105
otal	86,558,581	82,318,204	93,695,200	100,108,896	95,462,875
Ex-Europe					
	DENEZO - SELUI				
ustralia	620,211	48,943	10,829	6,672	1,965
ritish Guiana	128,174	129,510	108,157	99,598	101,478
ritish West Indies.	563,720	601,601	514,842	511,957	368,201
ewfoundland	669,978	684,392	749,974	677,603	514,505
lew Zealand	29,309	3,022	10,958	105,110	66,762
lgeria	1,309,804	437,193	464,090	314,959	1,027,408
uba oponomonomo	1,099,604	980,534	796,070	809,661	900,000
apan	26,987	10,089	69,453	114,460	5,349
anada	2,571,040	3,028,691	3,419,847	2,373,692	1,583,769
nited States	79,918	460,589	105,220	171,975	545,549
otal	7,098,745	6,384,564	6,244,440	5,185,687	5,114,896
rand Total	93,657,326	88,702,768	99,939,640	105,294,583	100,577,771

The above table shows imports of oats into the principal importing countries from 1927 to 1931. It will be noted that a large percentage of total world imports of oats is taken by Europe. Ex-European countries imported from 5 to 7 million bushels of oats per year.

The United Kingdom stands out as the most important importing market in the world, having taken during the five years from 1927 to 1931 about 26 per cent of total world imports of oats.

Austria, Belgium, Italy, the Netherlands, Denmark and Switzerland form a group of continental European countries which import a small but fairly constant volume of oats each year.

