

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics
Washington

WS-9

July 23, 1937.

THE WHEAT SITUATION
Including Rye

The United States probably will be the world's largest exporter of wheat in 1937-38 and at the same time domestic prices are likely to average higher than in 1936-37 if present prospects materialize. This would make the 1937 wheat crop the most valuable since about 1927, states the Bureau of Agricultural Economics.

A United States production of 882 million bushels was indicated by condition on July 1. A crop of this size would point to an exportable surplus of about 175 million bushels, which is about one-third of the combined wheat exports in prospect for 1937-38 from the surplus producing countries.

With prospective small world supplies and improved demand the adjustment to an export basis, after 4 years of small crops, may be more than offset by higher prices in importing countries.

Wheat prices during the next few months in both foreign and domestic markets will continue to be sensitive to new crop developments. Changes in prospects in the United States and Canada will be especially important, since these two countries will probably furnish most of the wheat for world trade until the Argentine and Australian crops are ready for market in January. On account of the scarcity of old crop wheat in the United States, the early movement of the new crop has been taken largely by mills, and prices have been on a comparatively high level. As mill takings become smaller, it is likely that some further adjustment in cash prices relative to prices in importing

countries will take place. However, if lower cash wheat prices in the next few months are accompanied by large exports, prices probably will advance later in the year, both because of the reduction in the exportable surplus and because of a prospective strengthening of world markets.

Prospective world wheat supplies for the year beginning July 1, excluding those of Soviet Russia and China, are now expected to be about 65 million bushels below supplies in 1936-37, and the smallest since 1926. A large reduction in carryover stocks much more than offsets an increase in prospective production. World carryover stocks of old wheat on about July 1, excluding those for Soviet Russia and China, are now tentatively placed at about 515 million bushels, or about 245 million bushels less than last year and the smallest stocks since the World War.

World production outside of Soviet Russia and China is tentatively placed at about 3,720 million bushels, which is 180 million bushels more than last year. Production in the Northern Hemisphere outside of Soviet Russia and China may be about 210 million bushels more than a year ago. The large prospective increase for the United States and a small increase for North Africa more than offset prospective declines for Canada and Asia. Production in Europe is expected to be about the same or only slightly larger than last year. In Soviet Russia some increase is expected over last year's harvest. In the Southern Hemisphere, where the crop is just being seeded, moisture conditions to date indicate some decrease in production compared with last year.

The August issue of this report will contain facts of significance to wheat farmers in planning their planting programs. A separate report on the Summer Outlook for Wheat will not be issued this year.

THE WORLD WHEAT SITUATION

BACKGROUND - Total world supplies of wheat, excluding those of China and including only net exports from Soviet Russia, averaged 4,100 million bushels for the 5 years, 1923-24 to 1927-28, increased to 5,013 million bushels in 1933-34, then declined sharply as a result of successive years of small production and increased world demand. Total world supplies for 1936-37 are estimated at 4,299 million bushels compared with 4,523 million bushels for 1935-36 and 4,696 million bushels for 1934-35.

Total world shipments of wheat averaged 751 million bushels for the 5 years 1923-24 to 1927-28, increased to a peak of 913 million bushels in 1928-29 (July-June), then declined sharply. In 1936-37 they were 610 million bushels compared with 490 million bushels in 1935-36 and 536 million bushels in 1934-35.

World market prices of wheat have been moving steadily upward since the spring of 1933, reflecting higher world commodity price levels, four successive below average harvests in North America and the 1935-36 short Southern Hemisphere crop. World prices during 1936-37 advanced sharply as a result of increased demand and the smallest supplies in recent years.

World wheat crop prospects

The first tabulation of the estimates of production for the year beginning July 1, 1937, are shown in table 1.

In the Prairie Provinces of Canada the deterioration of grain crops during June was the most serious ever recorded this early in the season. The worst conditions prevailed in southern and central Saskatchewan and eastern Alberta. Manitoba reported conditions approximately average on June 30. For the Dominion as a whole the condition figure for all wheat on June 30 was 52 percent of the long-time average, compared with the May 31 condition of 85 and the June 30, 1936, figure of 82. The lowest condition figure previously recorded on this date for all wheat in Canada was in 1933 when the condition was reported as 77. Conditions in Saskatchewan have shown little or no improvement during July. Scattered rains which fell during the second week helped feed prospects but were of little value to the grains. Conditions in Manitoba have continued generally good, although parts of the Province are becoming dry. If the weather should turn hot and humid, black stem rust damage would be likely to reduce yields, since rust spores are reported to be widely distributed. Conditions in Canada at this time indicate a total crop of about 185 million bushels. (Continued on bottom of page 5).

Table 1.- Production of wheat in specified countries,
1934-35 to 1937-38

Country	1934-35	1935-36	1936-37	1937-38
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
NORTHERN HEMISPHERE				
North America:				
United States	526,393	626,344	626,461	882,287
Canada	275,849	281,935	229,218	<u>1/</u> 185,000
Mexico	10,950	10,712	13,606	(11,000)
Total (3)	813,192	918,991	869,285	1,078,287
Europe:				
England & Wales	65,259	60,592	51,445	(
Scotland	4,144	4,480	3,527	<u>2/</u> 55,100
Northern Ireland	363	362	273	(
Irish Free State	3,803	6,686	7,839	<u>2/</u> 7,900
Norway	1,204	1,869	2,094	<u>3/</u> 2,200
Sweden	27,806	23,610	21,525	<u>3/</u> 23,000
Denmark	12,847	14,672	11,390	<u>3/</u> 11,000
Netherlands	18,042	16,653	16,259	<u>3/</u> 14,700
Belgium	16,757	16,101	16,153	<u>4/</u> 15,100
France	338,513	284,950	<u>4/</u> 253,500	<u>4/</u> 279,200
Spain	186,834	157,985	121,490	<u>4/</u> 139,600
Luxemburg	1,171	1,022	1,026	1,000
Portugal	24,690	22,092	8,651	<u>4/</u> 14,700
Italy	233,064	282,760	224,273	<u>4/</u> 264,600
Switzerland	5,519	5,971	4,468	<u>4/5/</u> 6,200
Germany	166,547	171,481	<u>6/</u> 162,663	<u>3/6/</u> 143,300
Austria	13,306	15,509	13,514	<u>3/</u> 14,000
Czechoslovakia	50,014	62,095	55,583	<u>3/</u> 52,400
Greece	25,679	27,180	23,449	<u>3/</u> 30,500
Poland	76,441	73,884	78,357	<u>3/</u> 63,100
Lithuania	10,476	10,093	7,949	<u>3/</u> 8,300
Latvia	8,051	6,520	5,272	<u>3/</u> 5,500
Estonia	3,107	2,267	2,433	<u>3/</u> 2,600
Finland	3,280	4,233	5,442	<u>3/</u> 5,100
Malta	310	179	236	(200)
Albania	1,579	1,556	1,129	(1,100)
Total (26)	1,298,806	1,274,802	1,099,860	1,163,400
Bulgaria	39,595	47,925	59,304	<u>7/</u> 62,500
Hungary	64,824	84,224	87,789	69,629
Rumania	76,553	96,439	128,715	<u>7/</u> 106,600
Yugoslavia	68,328	73,101	107,421	<u>7/</u> 88,200
Total (4)	249,300	301,689	383,229	326,929
Total Europe (30)	1,548,106	1,576,491	1,483,189	1,490,329

Table 1.- Production of wheat in specified countries,
1934-35 to 1937-38 Cont'd.

Country	1934-35	1935-36	1936-37	1937-38
	1,000	1,000	1,000	1,000
NORTHERN HEMISPHERE CONT'D	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>
Africa:				
Algeria	43,528	33,532	29,774	31,967
Morocco	39,586	20,036	13,242	17,637
Tunisia	13,779	13,302	8,083	<u>4/</u> 18,600
Egypt	37,277	43,222	45,700	44,937
Total (4)	134,170	113,692	96,799	113,051
Asia:				
Palestine	3,044	3,834	2,795	(3,000)
Syria & Lebanon	16,279	13,520	15,993	(15,700)
India	351,829	363,179	352,240	359,259
Japan	47,660	48,712	45,875	48,010
Chosen	9,268	9,747	8,095	11,041
Turkey	99,712	92,640	138,486	<u>7/</u> 110,200
Total (6)	527,792	533,638	563,490	526,310
Total 43 countries	3,023,260	3,145,812	3,012,763	3,223,177
Estimated Northern Hemisphere total, excluding Russia and China	3,079,000	3,201,000	3,066,000	3,273,000
SOUTHERN HEMISPHERE				
Argentina	240,669	141,462	247,834	<u>1/</u> 220,000
Australia	133,393	144,217	150,106	(150,000)
Union of South Africa	16,936	20,195	16,195	(15,000)
Estimated world total, excluding Russia and China	3,527,000	3,571,000	3,539,000	3,718,000

Compiled from official data except as otherwise noted.

- 1/ Based on weather conditions to date.
- 2/ Approximates the estimate of the London office of the Bureau.
- 3/ Estimate of the Berlin office of the Bureau.
- 4/ Estimate of the Paris office of the Bureau.
- 5/ Includes Maslin and Spelt.
- 6/ Includes the Saar.
- 7/ Estimate of the Belgrade office of the Bureau.

In Europe, excluding Soviet Russia, present indications point to a below-average crop and one which is about the same or only slightly larger than the small crop harvested in 1936. Estimates for the 26 European countries, excluding the Danube Basin, indicate an increase in the wheat crop of 6 percent over that of last year. In the Danubian countries, indications point to a decrease of 15 percent from the record crop of 1936. Deterioration in

the crop outlook continued through June in many parts of Central Europe and the Danube Basin; these areas include most of the European surplus producing countries. Generally speaking, the Mediterranean countries are expecting slightly larger harvests than the poor crops of 1936 but still below average. Increases are reported in France, Spain, Italy, and Greece. Significant reductions are noted in the Danubian countries, in Germany, Poland, and Czechoslovakia. In the Baltic States and the Scandinavian countries a small increase over last year's small harvest may result if weather conditions continue favorable. In Soviet Russia the crop outlook is reported to be promising in most regions.

Current estimates of production in North Africa indicate an increase of 17 percent over the small 1936 crop. Significant increases occur in Morocco and in Tunisia, where increases of 33 and 130 percent, respectively, are noted. The 1937 production for Tunisia is the largest on record. A 7 percent increase is indicated for Algeria, but Egypt shows a slight decrease.

In Asia the reports received indicate a production 3 percent less than that of 1936. Slight increases in production for India, Japan, and Chosen are more than offset by a decrease in Turkey.

In Argentina precipitation has been below normal, and if sufficient rain does not fall by the end of July, the crop will suffer damage. In some areas the sowing of wheat is at a standstill because of adverse weather conditions.

The general outlook for the new Australian crop seems good though there are complaints of dryness in some sections, notably in Victoria. The area indicated for harvest this year is 13,700,000 acres compared with 12,351,000 acres last year. Conditions were favorable to seeding and early development of the crop.

World wheat stocks and trade

World stocks of old crop wheat, excluding those of Soviet Russia and China, on about July 1 are tentatively estimated at about 515 million bushels which are about 245 million bushels less than stocks last year. It is estimated that Canadian stocks on July 1 were smaller than a year earlier by 97 million bushels, United States stocks by 47 million bushels, Australian stocks 8 million bushels, and Argentine stocks 3 million bushels. Table 2 shows the surplus remaining for export or carryover in Canada, Argentina, and Australia, together with United Kingdom port stocks and stocks afloat for the past 4 years. Stocks in European countries also are at the lowest levels in many years. While it is too early to have many reports from these countries, the evidence at hand indicates that European stocks are perhaps 85 million bushels smaller than a year ago.

Table 14 shows estimated world stocks of wheat for the past 10 years, together with other supply figures. The table also shows apparent world disappearance of wheat and average British Parcels price per bushel and the United States average price per bushel to growers, annually since 1927.

Table 2.- Wheat surplus for export or carryover in the three principal exporting countries, United Kingdom port stocks and stocks afloat, July 1, 1934-37 ^{1/}

Position	1934	1935	1936	1937
	Mil. bush.	Mil. bush.	Mil. bush.	Mil. bush.
Canada:				
In Canada	179	188	124	37
In United States	10	9	16	6
Argentina	107	68	34	31
Australia	83	54	37	29
Total	379 ^{1/2}	319 ^{3/4}	211 ^{1/2}	103 ^{1/2}
United Kingdom port stocks	15	10	10	10
Stocks afloat to:				
United Kingdom	13	11	14	12
Continent	10	10	8	12
Orders	10	6	5	10
Total	49	37	57	44
Total above	428 ^{1/2}	356 ^{3/4}	248 ^{1/2}	147 ^{1/2}

^{1/} Carryover at the beginning of the year (Canada, July 31; Argentina, January 1; Australia, December 1 of the previous year) plus production, minus domestic utilization for the year, minus monthly exports to date.

World trade in wheat in 1937-38 is expected to be below that of last year, but shipments from overseas countries may not be much different from those of 1936-37. A United States exportable surplus of about 175 million bushels of wheat in 1937-38 is indicated on the basis of present prospects ^{1/}, all of which will probably not be exported. Drought conditions in Canada have so reduced the prospects in that country that exports are expected to be reduced to 75 million bushels or less. Exports from Argentina and Australia combined may not be over 200 million bushels, and those from the Danubian countries about 50 million bushels. Exports from Soviet Russia are always an uncertain factor, but if they should amount to as much as 34 million bushels as in 1933-34 and exports from North Africa and miscellaneous countries should total 25 million bushels, exports of only about 550 million bushels or less would result. This would represent a reduction in total wheat exports of around 50 million bushels compared with last year, and would indicate that there will be active competition by importing countries for available wheat supplies in 1937-38.

Last year, overseas countries were prevented from participating in a considerable part of the benefit of increased trade which occurred because of the very large surplus in the Danubian countries. With greatly reduced crops this year in Central Europe and the Danube Basin, it is now quite certain that inter-European trade this year will be much smaller than a year ago.

^{1/} See "Domestic Wheat Prospects", page 14.

World trade in wheat in 1936-37 (July-June), computed as the total of net imports by European importing countries and world shipments to non-European countries, is tentatively placed at 576 million bushels, which is about 90 million bushels more than a year earlier. European net import requirements, 2/ excluding those of countries which have net surpluses, 3/ are now estimated at about 450 million bushels for the 1936-37 season. This estimate is 23 million bushels below that published by the Bureau in March of this year. Reductions in estimates of 14 million bushels for the United Kingdom, 11 million bushels for Italy, and 8 million bushels for France, and 2 million bushels for Denmark more than offset increases of 8 million bushels for Germany, 2 million bushels for the Irish Free State, and 1 million bushels each for Greece and Switzerland. The rather significant decline in the case of the United Kingdom imports is attributed to decreased consumption, in France and Italy it is largely due to statistical adjustments in the apparent supply and trade situation, and in Denmark to a marked shift from the usual wheat feeding to that of corn and other grains. Estimates by countries are shown in table 10. Shipments to non-European countries are now placed at 126 million bushels compared with 130 million bushels in 1935-36 and 120 million bushels, the estimate used in March. Tables 11 to 13 show figures on movement of wheat in international trade in 1936-37 compared with other years.

European wheat trade outlook for 1937-38

From present crop conditions and consumption trends no material change in United Kingdom wheat requirements during the coming season can be foreseen. In the case of Germany, it is reported that the Government is already conducting negotiations with Hungary and Rumania for the acquisition of a considerable part of the 1937 wheat surplus in these two countries at fixed prices. The large crop in Turkey of last year permitted exports of around 5 million bushels during the first 8 months of the season, most of which went to Germany and Italy. Some subsequent exports also have been made.

It appears quite possible for France to enter the new crop year with about a normal carryover. Because of the decline in consumption, domestic production plus North African supplies should nearly equal the total disappearance. With a crop of 279 million bushels and arrivals from northern Africa amounting to possibly 18 million bushels, it is likely that the National Wheat Board will hold imports to very low levels. Thus, unless damaging weather ensues from now on, it is to be expected that France will not be a very significant factor in world trade during 1937-38. Algeria will have grain for shipment to France, but just how much will be exported depends in part upon the Government's action in reconstituting stocks which were partially depleted during the present spring. If stocks are not rebuilt to a relatively large extent in Algeria, there should remain available for export to France approximately 7 million bushels of wheat, though in view of the various substitutions that can be made this figure is subject to change. The crop in Tunisia looks so favorable that heavy shipments are expected. While preliminary in nature, it is expected that exports of new crop bread wheat may reach 5 million bushels during the year, with durum amounting to $4\frac{1}{2}$ million bushels or more. This supply as usual will also go to France.

2/ Estimates and information concerning Europe largely from the European offices of the Bureau.

3/ Danubian countries, Poland, Czechoslovakia, and Soviet Russia.

Consumptive requirements in Italy have been changing during recent years, and just what they may be during the 1937-38 season is difficult to forecast. It appears, however, that the total disappearance indicated at present is around 275 million bushels. With old crop stocks below normal and with a crop of 265 million bushels, Italy would require, statistically, at least an additional 10 to 15 million bushels for domestic utilization. The exact amount will, of course, depend on the crop outturn and upon official policy. Because of foreign exchange difficulties, it is to be expected that imports will be held to a minimum amount, although if wheat prices and available foreign exchange supplies are such as to permit rebuilding year-end stocks toward their normal position, some increase in stocks and imports would appear most desirable. Since it seems that the reported purchases of foreign grain this year have been heavier than required by the usual needs, some recovery in the stocks situation has probably occurred already. Figures on Italian imports do not include purchases of bread wheat to be milled in bond for the provisioning of Italy's colonies. Takings of foreign wheat by Italy this year will be confined, as during the past year, almost entirely to bread wheat.

During the coming year Belgium will probably import about the same amount of wheat as in the past season, or perhaps slightly less, since stocks have increased a little toward a normal seasonal carryover. Total imports may, therefore, be in the neighborhood of 40 million bushels.

In Spain, it seems apparent that there will be sufficient supplies of grain for the territory under the control of the Burgos Government, but that heavy imports by the Valencia Government will be necessary. For Portugal there should be no necessity for importing foreign wheat except that which comes in under a special arrangement for their Island possessions. Total supplies in Portugal will not be burdensome and no exports are looked for, as the extra amount over consumptive requirements will go into an increased stock position for the following year.

No countries have announced an intention to accumulate "extra" reserves of wheat, with the possible exception of the United Kingdom and Czechoslovakia. In the United Kingdom there has been no new announcement, but there are remote possibilities in the Food Defense plans, which still appear to be only in the blue-print stage. In Czechoslovakia, on the other hand, it is indicated that most of the remaining wheat stocks may be used as a reserve. While no specific mention of wheat is made, it is of some importance to note that the Polish Government is reported to have decided to accumulate some reserves of rye and oats, and the Australian Government is indicated to be favoring some accumulation of "grain" reserves. In Switzerland similar ideas have been expressed.

Foreign wheat prices 4/

Liverpool and Winnipeg prices have advanced sharply since the middle of June to the highest levels since 1928, on account of rapid deterioration in the Canadian crop prospects because of drought, threatened rust damage in the United States, prospects of a small European wheat harvest, and an increasing concern among European millers relative to the supply of hard milling wheats. For the week ended July 10 the October future at Liverpool averaged \$1.41 compared with \$1.23 for the week ended June 19, while at 4/ Domestic prices are discussed on page 19.

Winnipeg it averaged \$1.38 and \$1.15 for the same 2 weeks, respectively. Deterioration of the crop in Canada was reflected in the greater advance in prices at Winnipeg than at Liverpool. For the week ended June 19 the October future at Winnipeg was 8½ cents lower than the same future at Liverpool, and by the week ended July 10 it was only 2½ cents lower than at Liverpool. Prices at Buenos Aires remain above an export basis to Europe as a result of limited remaining wheat supplies. Table 3 shows prices of futures at Liverpool, Winnipeg, and Buenos Aires, together with prices at Chicago, Kansas City and Minneapolis by months, January to June, and by weeks since June 1.

Table 3.—Average closing prices of September 1/ wheat futures, specified markets and dates, 1936 and 1937

Date	Winnipeg		Liverpool		Buenos Aires		Chicago		Kansas City		Minneapolis	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
Month-	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Jan.	87.1	108.7	---	---	---	---	87.9	111.0	84.7	107.1	93.7	117.0
Feb.	84.6	111.0	---	---	---	---	88.5	112.5	85.6	108.6	92.4	118.8
Mar.	84.5	120.3	---	135.9	---	---	87.6	119.2	84.2	114.9	90.7	125.2
Apr.	82.5	121.3	91.6	132.4	---	---	86.7	119.3	84.6	115.5	89.0	125.0
May	78.5	119.5	87.4	130.3	---	---	85.0	116.7	80.9	113.4	87.0	121.4
June	79.7	117.3	87.0	125.3	---	---	89.6	111.5	85.3	118.4	98.0	120.3
Week ended-												
June 5	78.0	112.4	84.0	123.6	90.8	3/	85.2	109.8	80.2	106.7	90.3	115.7
12	77.5	110.7	84.7	120.2	91.2	3/	85.5	108.2	80.2	105.4	91.2	114.3
19	80.2	114.8	88.0	123.4	91.8	3/ 3/	90.7	108.8	86.9	105.4	100.4	117.6
26	83.0	122.0	90.2	127.8	91.9	3/ 3/	95.4	114.4	92.2	111.4	107.1	126.4
July 3	83.5	134.4	90.3	138.6	92.8	3/ 3/	97.9	123.4	93.7	119.2	110.7	135.8
10	91.3	138.1	98.4	140.6	96.2	3/ 3/	106.3	124.6	103.5	120.0	121.0	139.6
High 4/	91.3	138.1	98.4	140.6	96.2	5/ 3/	106.3	124.9	103.5	120.7	121.0	139.6
Low 4/	76.0	106.2	83.1	120.2	90.1	5/ 3/	83.9	108.2	79.4	104.4	85.8	114.3

- 1/ October futures for Winnipeg and Liverpool.
- 2/ Conversions at noon buying rate of exchange.
- 3/ August futures.
- 4/ January 1 to date; Buenos Aires, June to date.
- 5/ August and September futures.

THE DOMESTIC WHEAT SITUATION

BACKGROUND.-- The carryover of wheat in the United States for the 5-year period (1924-28) averaged 115 million bushels. Stocks which began to accumulate in 1929 reached the record peak of 378 million bushels in 1933. Four small wheat crops since that time, however, reduced stocks to 138 million bushels by July 1, 1936. Stocks on July 1, 1937, have been forecast at about 90 million bushels.

Domestic wheat prices since the spring of 1933 have been unusually high relative to world market prices as a result of four small domestic crops caused largely by abnormally low yields per acre. During 1936-37 both world and domestic prices advanced sharply as a result of increased demand and the smallest supplies in recent years.

The acreage seeded to wheat for harvest in 1919 was the largest on record up to that time. For the 1919 to 1924 crops, seeded acreage declined from 77 million to 56 million acres. Then it rose to 71 million acres in 1928 and during the 1928-32 period averaged 67 million acres. For the 1934 crop seeded acreage was brought down to 64 million acres. The acreage seeded for harvest this year increased to 81 million acres, the largest area seeded in the history of the country.

Domestic wheat prospects

The production of wheat in the United States was indicated by the July 1 condition to be 382 million bushels. This is considerably more than the 626 million bushels produced in 1936 and the average of 533 million bushels for the past 4 years, when adverse weather conditions greatly reduced yields per acre. Estimated yields of 10.9 bushels per seeded acre this year are again below the 15-year (1922-36) average of 11.7, but with the largest seeded acreage in the history of the United States, the July estimate is only 17 million bushels greater than the average of 865 million bushels for the 5 years 1928-32.

Winter wheat production was indicated at 664 million bushels compared with 519 million bushels in 1936, and the 5-year (1928-32) average of 623 million bushels. Spring wheat production was indicated at 218 million bushels, which represents a sharp increase over the 107 million bushels produced in 1936, but is still well below the 5-year average of 241 million bushels. Excessive heat during July has hastened the maturity of the spring wheat crop. However, there has been some spread of rust on susceptible varieties. Reports of heavy rust damage in Marquis, Ceres, and Reward wheat varieties in the Red River Valley of western Minnesota and eastern North Dakota have been verified by Department observers. Only a trace of rust has appeared on durum wheat so far and Thatcher, a variety of high quality hard red spring wheat, is proving highly resistant to forms of rust present this year. In interpreting yield from the July condition figures, the Board made allowance for probable losses from rust, as indicated by a study of the relationship between the July condition and the final outturn in other years when growing conditions and the presence of rust were comparable with this year.

Stocks of old wheat in the United States 5/ as of July 1 are still considered to be about 90 million bushels. This figure is made up of

5/ July 1 stocks in various positions since 1922 are shown in the May issue of "The Wheat Situation" on page 15.

stocks on farms, in country elevators and mills, in cities (commercial stocks) and in merchant mills and elevators. Stocks of old wheat on farms July 1, 1937, were estimated at 22 million bushels and in cities at 16 million bushels, making a total for these two items of 38 million bushels compared with 43 million bushels in 1936 and 54 million bushels in 1935. Estimates of stocks in country elevators and mills, and in merchant mills and elevators, will not be available until later this month. The stocks figures as published by the Crop Reporting Board for country elevators and mills will include only old wheat, but those for merchant mills and elevators, as published by the Bureau of the Census, will include considerable new wheat this year, and it will be necessary to make allowances for such wheat; this allowance will be made in the August issue of "The Wheat Situation". Mill stocks were so reduced at the time of the new harvest, which was earlier than usual this year, that most of the early market receipts of new wheat have been taken directly by mills.

An analysis of prospective wheat supplies and distribution by classes for 1937-38, on the basis of a tentative distribution of 90 million bushels of old crop stocks and the July 1 indicated production by classes, indicates that supplies of hard red spring and durum wheat are ample to take care of the probable prospective requirements, and that there will be surplus supplies of hard and soft red winter and white wheats over domestic requirements.

Table 4.- Estimated prospective wheat supplies and distribution by classes for 1937-38

Item	Hard	Soft	Hard			
	Red	Red	Red	Durum	White	Total
	Winter	Winter	Spring			
	Million	Million	Million	Million	Million	Million
	bushels	bushels	bushels	bushels	bushels	bushels
July 1, 1937 stocks	49	17	10	6	8	90
Production <u>1/</u>	351	258	135	31	107	882
Total	400	275	145	37	115	972
Prospective utilization	295	180	115	30	50	670
"Normal" carryover	105	95	30	7	65	302
Surplus available for export or addition to normal carry- over	52	75	0	0	50	177

1/ Indicated July 1.

Table 4 shows the forecasted prospective utilization by classes in addition to the estimated supply made up of the tentative July 1 carryover and indicated production. Utilization figures based on disappearance since 1928 are presented as an indication of utilization. The actual utilization by classes will depend, of course, on a number of factors, two of which are the relative prices of the different classes of wheat, and the price of wheat relative to feed grain prices and supplies in the various sections of the country, especially during the period prior to the harvesting of the new corn crop. Assuming a normal carryover by classes, indications point to a surplus available for export or for addition to the normal carryover at the end of the year of about 50 million bushels each of hard red winter and white wheats and about 75 million bushels of soft red winter wheat.

United States hard red winter wheat is a "strong" bread flour wheat and can be substituted by millers in importing countries for short Canadian and Argentine supplies of the same type. As a result it is to be expected that importing countries will take all the hard red winter wheat they can obtain from us this year. Moreover, because of small world wheat supplies in prospect, it is likely that more than the usual demand for soft wheats may be expected. It is doubtful, however, that as much of the soft red winter and white wheat as shown in table 3 as available for export will be exported. Most of the wheat produced in Europe and Australia consists of soft varieties, and "strong" wheats such as produced in Canada, Argentina and the southwestern United States are needed to produce a high quality bread flour.

During the 10-year period from 1921-22 to 1930-31, exports of hard red wheats averaged 67 million bushels and reached a 1921-36 maximum of 143 million bushels in 1924-25, while exports of soft red winter averaged only 13 million bushels for the 10-year period with a maximum of 31 million bushels in 1926-27. Table 5 shows separate exports for these 2 periods of hard red winter and hard red spring, and also export figures for white wheat. Most of the hard red and soft red winter wheat is exported from Gulf and Atlantic ports, with the Pacific Northwest averaging only 4 percent of the hard red winter and 20 percent of the soft red winter wheat exports for the 10-year (1921-22 to 1930-31) period.

Table 5.- Wheat exports by classes, excluding durum, 10-year average and 1921-36 maximum

Item	Hard red wheats			Soft	White
	Winter	Spring	Total	red winter	
	Million bushels				
10-year average (1921-22 to 1930-31)	59	8	67	13	20
Largest exports since 1920	121	22	143	31	30
	(1924-25)	(1924-25)	(1924-25)	(1926-27)	(1927-28)

Total supplies of white wheat, the type produced largely in the Pacific Northwest, are expected to be about 115 million bushels, compared with 105 million bushels, the 8-year (1929-36) average for which years estimates are available. Accordingly, the Pacific Northwest may be expected to have its usual excess over local requirements. Inasmuch as the United States will be a net exporter of wheat in 1937-38, however, prices in the Gulf and Atlantic points are not expected to be high enough to attract shipments of soft wheat from the Pacific Northwest to these points, as was the case in the past 3 years. As pointed out in the June issue of "The Wheat Situation", about the same quantity of flour may be expected to be shipped to Eastern coastal points as was the case in the 20's. Shipments of wheat and flour in terms of wheat to eastern points in the United States for the 1933-34 to 1935-36 period - during which time prices east of the Rockies were above export levels - averaged 15 million bushels compared with an average of 2 million bushels for the 10-year period from 1922-23 to 1931-32.

Domestic wheat prices

Wheat prices in domestic futures markets, influenced by the same factors as prices in Liverpool 6/, rose sharply after the middle of June, but were checked during the week ended July 10, when market receipts of winter wheat were the heaviest since 1931. Table 3 shows futures prices at Chicago, Kansas City, and Minneapolis.

Cash prices in domestic winter wheat markets declined in the latter part of June owing to heavy receipts and further adjustment to an export basis, but recovered about all of the loss by early July as the result of the sharply advanced futures market. Cash prices in Minneapolis averaged higher in early July than during the last half of the month, reflecting the concern over rust in the domestic spring wheat area and the drought in Canada. Table 6 shows cash prices in important domestic markets, and table 7 gives the price spreads between domestic wheat prices and prices at Winnipeg and Liverpool.

6/ See "Foreign wheat prices" on page 12.

Table 6.-- Weighted average cash price of wheat, specified markets and dates, 1936 and 1937

Date	:All classes: and grades: six markets:	No. 2 Hard Winter: Kansas City:	No. 1 Dk.N.Spring: Minneapolis:	No. 2 Hd. Amber Durum: Minneapolis:	No. 2 Red Winter: St. Louis:	White Seattle 1/	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Month -																
Jan.	106.6	144.3	112.6	138.0	132.6	165.9	119.9	171.3	108.7	139.6	88.9	112.2				
Feb.	107.1	138.5	110.0	136.5	131.1	159.4	121.4	170.0	109.0	143.2	86.3	114.4				
Mar.	98.1	141.6	105.9	138.6	123.9	153.0	113.8	183.2	107.9	143.0	86.4	117.0				
Apr.	94.9	140.8	102.0	140.0	122.6	155.9	105.8	172.0	106.7	143.6	84.9	119.5				
May	90.0	131.5	94.9	132.0	113.6	146.3	106.0	128.4	101.7	131.9	80.5	115.8				
June	96.1	123.0	96.3	120.8	124.1	145.0	112.1	122.4	95.3	122.3	81.0	112.5				
Crop yr. av. ended June:	99.8	121.2	105.1	121.4	126.0	156.9	112.8	146.9	94.9	111.1	82.9	107.7				
Week ended:-																
June 5	90.6	123.7	91.3	127.2	119.5	139.4	103.6	117.2	99.7	125.3	78.3	110.0				
12	90.1	123.3	89.4	123.4	118.2	136.3	105.1	109.9	95.4	123.1	78.1	109.6				
19	96.8	123.9	95.7	123.5	123.6	144.0	115.2	109.0	97.4	123.5	81.5	112.0				
26	101.6	124.5	101.8	119.6	132.5	152.2	127.6	131.6	97.6	119.8	86.3	114.8				
July 3	99.4	122.4	100.3	121.3	124.5	151.9	125.4	148.1	96.5	128.1	81.8	116.6				
10	108.8	121.9	111.4	122.2	139.3	156.2	142.2	142.0	105.8	124.5	89.6	---				
High 2/	108.8	149.6	118.0	144.5	139.3	169.8	142.2	206.2	110.9	147.4	90.2	122.0				
Low 2/	87.4	121.9	89.4	119.6	108.4	136.3	103.2	109.9	95.4	119.8	78.1	109.5				

1/ Weekly average of daily cash quotations, basis No. 1 sacked.

2/ January 1 to date.

Table 7.- Spreads between domestic wheat prices and prices at Winnipeg and Liverpool, specified periods, 1934-37

Month and year	Futures per bushel				Cash wheat per bushel	
	Amount Chicago		Amount Kansas City		Amount No. 2 Hd. Winter	
	averaged		averaged		:(Kansas City) averaged	
	above		above		above	
	Winnipeg	Liverpool	Winnipeg	Liverpool	No. 3 Mani-	Parcels
	Sept.	Oct.	Sept.	Oct.	toba	:(Liverpool)
	:(Winnipeg):					
	Cents	Cents	Cents	Cents	Cents	Cents
May -						
1934	15	16	7	8	20	19
1935	---	13	---	9	21	15
1936	6	2	2	-6	24	8
1937	-3	-14	-6	-17	6	-9
June						
1934	16	20	8	12	18	22
1935	---	4	---	0	14	9
1936	10	3	6	-2	23	10
1937	-6	-14	-9	-17	1	(-12)
Week ended July 10						
1934	11	17	6	12	14	<u>1/</u>
1935	---	11	---	12	21	<u>1/</u>
1936	15	8	12	5	26	<u>1/</u>
1937	-14	-16	-18	-21	-16	<u>1/</u>

1/ Liverpool parcels not available.

Table 8.- Average price per bushel of wheat, specified markets and dates, 1937

Date	Kansas : City	Winni- : Minneapolis:	Winni- : peg	Buenos : Aires	Liver- : pool	Great : Britain:	Berlin 6/
	1/	2/	3/	4/	4/	5/	6/
	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Jan.	138.0	165.9	120.2	91.3	126.7	129.9	2.23
Feb.	136.5	159.4	121.1	99.5	124.7	119.4	2.23
Mar.	138.6	153.0	130.3	114.2	133.0	119.1	2.23
Apr.	140.0	155.9	133.0	123.4	143.5	133.2	2.23
May.	132.0	146.3	125.7	122.5	141.1	130.1	2.23
June.	120.8	145.0	119.6	116.5	129.8	128.3	
Week ended -							
June 5	127.2	139.4	116.2	122.1	133.9	130.9	2.22
12	123.4	136.3	113.2	115.4	126.5	130.0	2.22
19	123.5	144.0	118.0	111.9	127.7	129.0	2.22
26	119.6	152.2	122.5	116.3	128.3	125.7	2.22
July 3	121.3	151.9	136.4	126.5	139.4	125.7	
10	122.2	156.2	138.7	124.3	142.6		

Prices are averages of daily prices for the week ending Saturday except as follows: Berlin prices are Wednesday quotations. Prices at foreign markets are converted to United States money at the current rates of exchange.

1/ No. 2 Hard Winter. 2/ No. 1 Dark Northern Spring. 3/ No. 3 Manitoba Northern. 4/ Near futures. 5/ Home-grown wheat in England and Wales. 6/ Central German wheat, wholesale trade price free Central German Station.

Table 9.- Durum wheat: Area and production in Morocco, Algeria, and Tunisia, average 1930-34, annual 1936 and 1937

Country	Acreage			Production ^{1/}		
	1930-34	1936	1937	1930-34	1936	1937
	acres	acres	acres	bushels	bushels	bushels
Morocco	2,179	2,402	2,051	20,734	8,488	10,288
Algeria	3,022	3,232	2,812	22,594	18,651	17,637
Tunisia	1,745	890	1,606	9,174	4,409	10,288
Total	6,946	6,524	6,469	52,462	31,548	38,213

From report of the Paris office of the Bureau of Agricultural Economics.

^{1/} Table 11 in "The Wheat Situation" for June 1937 corrected. The original data, it appears, was converted as if 1,000 tons instead of 1,000 quintals.

Table 10.- Net imports of wheat, including flour, into European countries, year beginning July 1, 1935-36 and 1936-37

Country	Net imports reported				
	1935-36	1936-37	July 1	1935-36	1936-37
	Million bushels	Million bushels	to	Million bushels	Million bushels
Austria	7	10	Apr. 30	6	8
Belgium	39	42	Apr. 30	32	34
Czechoslovakia	1	<u>2/</u> -9	May 31	1	<u>2/</u> -9
Denmark	9	8	May 31	8	6
Finland	4	3	Apr. 30	3	3
France	7	14	Mar. 31	6	5
Germany	<u>3/</u>	26	May 31	<u>3/</u>	12
Greece	<u>15</u>	18	Apr. 30	11	18
Irish Free State	15	13	May 31	14	13
Latvia	<u>2/</u> -2	1	Apr. 30	<u>2/</u> -2	1
Netherlands	21	22	May 31	19	20
Norway	8	8	May 31	7	8
Poland	<u>2/</u> -8	<u>2/</u> -6	May 31	<u>2/</u> -7	<u>2/</u> -6
Portugal	<u>2/</u> -3	3	Apr. 30	<u>2/</u> -1	<u>3/</u>
Spain	<u>4/</u>	6	June 30	<u>3/</u>	---
Sweden	<u>2/</u> -2	1	May 31	<u>2/</u> -2	<u>4/</u>
Switzerland	17	18	May 31	14	17
United Kingdom	205	206	May 31	185	183
Total imports of above	348	399			
Italy	7	51			
Total imports	355	450		306	328
Total exports	15	15		12	15
Total, net imports	340	435		294	313

Compiled from official sources, except as otherwise stated.

^{1/} Based largely on estimates of the Foreign offices of the Bureau of Agricultural Economics.

^{2/} Net exports. ^{3/} Less than 500,000 bushels. ^{4/} Net exports of less than 500,000 bushels.

Table 11.- Movement of wheat, including flour, from principal exporting countries, 1933-34 to 1936-37.

Country	Exports as given by official sources						Date
	Total		July 1 to date shown				
	1933-34	1934-35	1935-36	1934-35	1935-36	1936-37	
	1,000	1,000	1,000	1,000	1,000	1,000	
	bushels	bushels	bushels	bushels	bushels	bushels	
United States	37,002	21,532	15,939	20,337	14,829	19,362	May 31
Canada	198,555	169,630	237,447	161,202	209,747	199,093	May 31
Argentina	144,854	187,000	76,577	187,000	76,577	162,085	June 30
Australia	86,509	108,010	102,258	93,012	88,168	73,781	Apr. 30
Russia	33,787	4,286	29,704	3,918	28,816	3,729	Apr. 30
Hungary	29,615	12,499	14,644	10,055	11,059	24,958	Apr. 30
Yugoslavia	839	4,401	728	4,117	156	14,269	Apr. 30
Rumania	248	3,432	9,996	239	9,996	5,042	Apr. 30
Bulgaria	4,236	375	987	7	954	5,873	Apr. 30
British India	2,084	2,318	2,529	1,627	1,599	11,947	Feb. 28
Total	537,729	513,483	490,800				
	Shipments as given by trade sources					Date	
	Total		Week ended (1937)				
	1934-35	1935-36	June 26	July 3	July 10		
	1,000	1,000	1,000	1,000	1,000		
	bushels	bushels	bushels	bushels	bushels		
North American 1/....	162,832	219,688	2,920	4,024	1,259		
Canada, 4 markets 2/:	176,059	246,199	1,645	1,314	956		
United States	20,997	14,207	379	374	243		
Argentina	186,228	77,384	816	1,084	670		
Australia	111,628	110,060	1,872	2,168	1,120		
Russia	1,672	30,224	0	0	0		
Danube & Bulgaria 3/:	4,104	8,216	376	800	120		
British India	4/ 2,318	4/ 2,529	1,064	816	1,008		
Total 5/	468,782	448,101					
Total European ship- ments 1/	887,752	355,032	5,536				
Total ex-European shipments 1/	147,938	133,528	1,912				

1/ Broomhall's Corn Trade News.

2/ Fort William, Port Arthur, Vancouver, Prince Rupert, and New Westminster.

3/ Black Sea shipments only.

4/ Official.

5/ Total of trade figures includes North America as reported by Broomhall's, but does not include items 2 and 3.

Table 12.- Shipments of wheat, including flour from principal exporting countries, specified dates, 1935-36 and 1936-37

Date	Argentina		Australia		Danube		North America	
	1935-36	1936-37	1935-36	1936-37	1935-36	1936-37	1935-36	1936-37
	bushels	bushels	bushels	bushels	bushels	bushels	bushels	bushels
July - May	73,500	157,322	104,800	93,604	8,168	61,992	191,912	207,558
Week ended								
June 5	1,456	2,720	1,540	3,833	0	904	6,400	3,016
12	940	1,180	1,264	2,284	0	968	6,912	4,080
19	188	1,556	1,864	2,108	0	504	4,856	4,324
26	1,300	816	592	1,872	48	376	5,056	2,928
July 3	928	1,084	516	2,168	96	800	5,328	4,024
10	856	670	880	1,120	168	120	5,360	2,513

Compiled from Broomhall's Corn Trade News.

Table 13.- Exports of wheat and wheat flour from the United States, 1935-36 and 1936-37 1/

Date	Wheat		Wheat flour		Wheat including flour	
	1935-36	1936-37	1935-36	1936-37	1935-36	1936-37
	bushels	bushels	barrels	barrels	bushels	bushels
July - May	285	2,398	3,035	3,609	14,829	19,362
Week ended						
June 5	0	81	18	35	85	245
12	0	512	36	39	169	695
19	0	15	29	24	136	128
26	18	220	34	32	178	370
July 3	5	271	25	22	123	374
10	0	51	26	41	122	243

Compiled from reports of the Department of Commerce.
1/ Includes flour milled in bond from foreign wheat.

Table 14.-World supply and distribution, excluding Soviet Russia and China, and prices of British Parcels and United States price to growers, 1927-28 to date

Year beginning July 1	: Estimated carry- in stocks	: Pro- duction: 1/	: Net exports: from Soviet Russia	: Esti- mated total supply	: Esti- mated carry- out stocks	: Appar- ent disap- pearance	: British: Parcels: average price per bushel	: U.S. average: price per bushel to growers	: British Parcels minus U.S. price to growers
	: Mil. bush.	: Mil. bush.	: Mil. bush.	: Mil. bush.	: Mil. bush.	: Mil. bush.	: Cents	: Cents	: Cents
1927-28:	687	3,673	5	4,365	753	3,612	157.7	122.3	31.4
1928-29:	753	3,996	---	4,749	1,027	3,722	125.9	98.8	30.1
1929-30:	1,027	3,584	7	4,618	943	3,675	130.8	101.5	29.3
1930-31:	943	3,847	112	4,902	1,055	3,847	79.6	62.4	17.2
1931-32:	1,055	3,865	70	4,990	1,041	3,949	59.4	41.4	18.3
1932-33:	1,041	3,863	17	4,921	1,142	3,779	53.8	39.4	14.4
1933-34:	1,142	3,837	34	5,013	1,167	3,846	69.1	72.0	- 2.9
1934-35:	1,167	3,527	2	4,696	922	3,774	80.0	87.2	- 7.2
1935-36:	922	3,571	29	4,522	762	3,760	88.5	86.1	2.4
1936-37:	762	3,530	---	4,292	4/515	4/3,777	4/125.5	113.1	4/12.4

1/ Excludes production and stocks in Soviet Russia and China.
 2/ Converted at current rates of exchange.
 3/ Simple average of 12 monthly prices.
 4/ Tentative estimate.

THE RYE SITUATION

BACKGROUND - Rye production in the United States before the War about equaled domestic utilization. During the War, acreage was increased and large exports followed. In 1933, 1934 and 1936, production was reduced by drought conditions to less than the amount normally used in the United States, and a considerable amount of rye was imported. A large crop in 1935 greatly reduced but did not eliminate imports.

The production of rye in the United States was indicated by condition on July 1 as 50 million bushels compared with $25\frac{1}{2}$ million bushels in 1936 and the 5-year (1928-32) average of 38 million bushels. The crop in prospect is large enough to amply provide for domestic requirements in 1937-38 and any imports will be to satisfy only particular quality requirements. The acreage of rye for harvest as grain was indicated at 3,960 thousand acres, which, with the exception of 4,141 thousand acres harvested in 1935, is the largest acreage since 1923. Nebraska is the only important rye State showing a decreased acreage.

The increase in acreage this season is widespread and especially large in the leading rye States of the Northwest. The acreage in North Dakota at 890 thousand acres is double that of last year. Rye condition on July 1 at 76.9 percent indicates a yield per acre of 12.7 bushels compared with 9.3 bushels in 1936 and the 10-year (1923-32) average of 12.0 bushels. Nearly all states reported good stands where fields were not over-grazed and fair to good yields are expected rather generally.

During June cash rye prices in the United States continued the decline from an import to a domestic basis, which started in April. No. 2 Rye at Minneapolis averaged 91.5 cents for the week ended July 3 compared with 116.6 cents for the week ended April 10, 109.7 cents for May 10 and 97.7 cents for June 10. On July 13 and again on July 16 prices advanced sharply influenced principally by strength in wheat.

The weighted average price per bushel of reported cash sales of No. 2 Rye at Minneapolis, monthly since 1915, was given in "The Wheat Situation" for June, page 18. Insertion of the June average of 99.5 cents and the weighted average for the 1936-37 year of 97.2 cents brings this table up to date.

In Europe the rye crop outlook is even less favorable than it is for wheat, and a total harvest below the 1936 level seems probable. Deterioration in many parts of Central Europe and the Danube Basin continued through June.

In Germany the abandonment of winter rye acreage is estimated to be 5.8 percent compared with a 4.2 percent abandonment last year. On the basis of the winterkill and the reduced fall seedings, a net decrease in the rye acreage of 10 percent now seems probable. The Berlin office of the Bureau estimates a probable crop of around 255.9 million bushels, if favorable weather prevails. This estimate compares with the 1936 crop of 290.8 million bushels. In Poland the acreage was reduced about 6 percent. This reduction and the less favorable crop conditions compared with both last year and with the average, indicates a

probable production of 228.3 million bushels compared with 250.5 million bushels last year. Rye condition in Czechoslovakia remains below average and below last year, despite some improvement during May. A crop well below average and not greatly different from the poor harvest of 1936, is now indicated as being around 57.1 million bushels. The crop last year was reported as 56.5 million bushels.

Germany, Poland, and Czechoslovakia last year produced 70 percent of the total European rye crop.

Table 15.- Rye: Acreage, yield, production, supply, indicated disappearance, net exports, and price 1919-20 to 1937-38

Year beginning July	Acreage harvested	Average yield per acre	Production			Net imports	Stocks at end of year	Indicated disappearance	Farm price per bushel
			United States	World excluding U.S. and China	U.S. as a percentage of world				
	: 1,000 acres	: Bush.	: 1,000 bush.	: Mil. bush.	: Per-cent	: 1,000 bush.	: 1,000 bush.	: 1,000 bush.	: Cents
1928-32 av.	3,315	11.5	38,212	96.9	3.9	3/2,686	---	---	55.2
1934-35	2,035	8.4	17,070	94.2	1.8	11,230	11,283	---	71.8
1935-36	4,141	14.2	58,597	97.6	6.0	2,236	22,299	49,817	39.5
1936-37	2,757	9.3	25,554	91.3	2.8	6/3,752	(6,001)	(45,604)	4/(80.5)
1937-38 <u>5/</u>	3,960	12.7	50,398	---	---	---	---	---	---

- 1/ Total imports minus total exports (domestic plus foreign). For the period 1919 to 1928 net exports averaged 30,846,000 bushels annually; pre-war production about equaled domestic utilization. (1 bbl. of rye flour = 6 bushels of rye.)
- 2/ Includes stocks on farms as of June 1 (available only beginning with 1935 and only for June 1) plus commercial stocks as of July 1.
- 3/ Net exports.
- 4/ Preliminary figure published December 1936.
- 5/ July 1 indications.
- 6/ Net imports for 11 months (July-May).