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WORLD WHEAT SURVEY AND OUTLOOK

MAY 1943

Helen C. Farnsworth, V. P. Timosbenko, and Meriam A. Clough

Mounting evidence of heavy wheat utilization in North America has been a major feature of the past four months. In the United States, domestic disposition will reach at least a billion bushels in the crop year. For feed and alcohol alone, the use of wheat in this country will considerably exceed the world's net exports of wheat and flour in 1942-43. In the four chief exporting countries combined, wheat utilization will be over 300 million bushels larger than the previous maximum in 1930-31. Yet the United States carryover will be the second largest on record, and August 1 stocks will be larger than ever before in Canada, Australia, and Argentina. How much the United States can safely divert to feed and alcohol in 1943-44 will depend in part on how far transport facilities will permit importation of Canadian and other grain.

World net exports during August-May were smaller even than last year. The shipping position continued tight, though some progress was made in combating the submarine menace. To release tonnage, Britain reduced the amount of wheat in her national loaf and drew upon her wheat reserves. Small increases in exports to the USSR, Turkey, French North Africa, India, and Mexico have been more than offset by reductions to other countries. In the crop year, world net exports seem likely to come to less than 350 million bushels.

In Axis-Europe the bread-grain position of 1942-43 was the worst since 1917-18. Except in the Danube basin, however, bread rations were not generally reduced. Supplies were stretched by further increases in flour extraction rates and in percentages of admixtures of non-wheat flours. The current shortages of bread in Axis-Europe, the Middle East, and French North Africa seem likely to be partially relieved by better crops in 1943.

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The tide of warfare, which had turned in favor of the United Nations in the latter part of 1942, moved more strongly in the same direction during February–May 1943. The largest gain was in French North Africa, where Axis resistance ended before mid-May. This brought the coast of northern Africa under the control of the United Nations and went far toward opening the Mediterranean Sea to their shipping. On the eastern front, the great Russian gains made in the winter offensive through mid-February were mostly maintained, though Kharkov and part of the western bank of the Donetz River were again lost to the Axis forces. As of June 10, a new big offensive in Russia and a United Nations invasion of the Continent appear imminent. In the

Pacific war zone, Allied gains were less spectacular. But the Japanese lost in May–June most of the territorial gains they had made in China during the three preceding months; and American forces retook Attu in the Aleutian Islands in a surprise move in late May.

Perhaps as important as the specific military gains mentioned above was the progress made by the United Nations during February–May in combating the submarine menace to Allied shipping. Monthly construction of shipping in the United States rose sharply from 1,008,000 deadweight tons in January to 1,695,000 tons on the average in April and May. On May 19 Winston Churchill stated that for six months past United States shipbuilding had more than replaced the current losses of “both Allies.” In early June the First Lord of the Admiralty announced that more submarines had been sunk in the preceding twelve months than in the entire previous war period, with the rate of sinkings in the

last six months 25 per cent higher than that of the six months preceding. These improvements in the shipping position were associated with reductions after January in marine war-risk insurance rates amounting to as much as a fourth or even a third on some South Atlantic routes. Smaller reductions have been made in recent weeks in the insurance rates on certain Pacific runs. But the rates remaining in force in June clearly pointed up the fact that the submarine menace has been lessened rather than removed.

The wheat situation of February–May was little affected by the important military and shipping developments of the period. Less wheat was sunk en route to the United Kingdom and to Africa than would have been lost if

the Battle of the Atlantic had not progressed favorably. Probably more wheat and flour was moved to Soviet Russia and to North Africa than would otherwise have gone there. British wheat stocks, sharply drawn down through April, were partially restored by heavier May imports than would have arrived if shipping losses had been larger. But the net effect of these particular developments was small.

The most important feature of the wheat situation of the past four months has been the expansion of wheat utilization in the United States. In this country the use of wheat for feed alone will approach the huge sum of 375 million bushels in the crop year—exceeding the low volume of international trade in wheat and flour during 1942–43. It will raise the total domestic utilization of wheat in the United States to a record total of over a billion bushels in the present crop year, reducing the United States carryover

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to some 550 million bushels. At present it appears that stocks of this size will not be large enough, with the prospective new crop, to meet continuing heavy demands for subsidized wheat for feeding and alcohol production, if large domestic stocks should be retained as reserves against special wartime emergencies and against past and prospective commitments of the United States for lend-lease and relief shipments abroad.

In contrast, Canada, Australia, and Argentina will hold heavier year-end stocks in 1943 than they have ever held before. The Canadian carryover alone will be larger than the United States carryover and about nine-tenths as large as the new United States crop. To the limited extent that transport facilities permit, the United States will presumably draw on these large reserves to keep livestock numbers in this country at or near their present peak.

The total net exports of the four major net-exporting countries will almost certainly be smaller in 1942-43 than in 1941-42 or any other year in several decades. British takings have been considerably reduced as a result of a bumper domestic crop, lowered requirements for bread, and drafts on stocks; shipments to Continental European neutrals have been almost as low this year as last; most Oriental markets have been closed since December 1941; and increased shipments to the USSR, Turkey, French North Africa, and Mexico have not been large enough to offset the reductions in exports to other areas. Net exports from countries other than the four chief exporters will also be small in 1942-43—probably at a new low level. The Danube countries have had little, if any, surplus wheat available, even after making some reductions in bread rations and lowering further the quality of some of the bread. The USSR, Turkey, Iraq, Iran, and probably India—countries that are usually net exporters—will be importers on balance in the present year. And French North Africa, though probably still a net exporter, will undoubtedly have a smaller export balance than in most earlier years. Thus world net exports will add up to a very low total in 1942-43—probably to less than 350 million bushels, as com-

pared with our estimate of 405 million for last year.

In spite of an expected increase of about 375 million bushels in the wheat utilization of the four major exporting countries, wheat disappearance in the world ex-Russia may be scarcely 250 million bushels above last year's low level. This reflects the notably low utilization of wheat in Continental Europe this year. Although bread rations have been well maintained throughout that area except in the Danube basin, the use of wheat in bread has been generally reduced, and the quality of the bread available against ration coupons has greatly deteriorated. Wheat-extraction rates of 90 to 100 per cent are common, and in many countries wheat represents less than half of the cereal-potato content of the bread. The only bright feature in the European bread situation is the good outlook for 1943 bread-grain crops. In retrospect, 1942-43 will probably appear to have been the worst "bread year" since the war began.

UNITED STATES

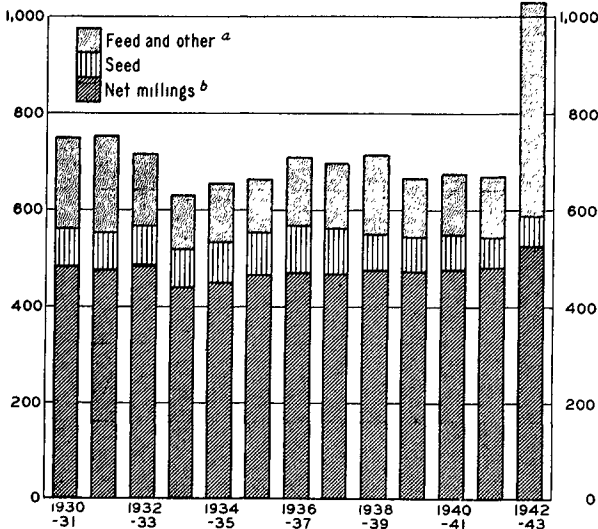
Mounting evidence of abnormally heavy wheat disappearance has been the leading feature of the wheat situation in this country during the past four months. Administrative decisions and orders have been influenced by the growing prospect for a reduced carryover; and complacency over a very heavy wheat surplus has given way to concern over the possible inadequacy of future supplies. The course of wheat prices has been only slightly affected by this change in outlook.

Domestic disposition.— Since our last wheat survey was published four months ago,¹ both private and official estimates of wheat disappearance in this country have been revised upward, and forecasts of the 1943 carryover have been correspondingly reduced. These changes have been mainly based upon evidence of unexpectedly heavy diversion of wheat to feed channels, though partly also on reports of increased flour retention and increased use of wheat for alcohol production.

¹"World Wheat Survey and Outlook," WHEAT STUDIES, January 1943, XIX, No. 4.

Chart 1 shows our current appraisal of domestic wheat utilization in 1942-43 as compared with the 12 preceding years. The most heavily shaded section of each bar represents the estimated domestic retention of flour milled during the course of the crop year. Although such retention normally coincides

CHART 1.—UNITED STATES DOMESTIC WHEAT UTILIZATION, ANNUALLY FROM 1930-31*



* Data as shown for recent years in Appendix Table IV.

private hands, notably heavy at the end of March after large purchases during the three preceding months, will probably still be above average size on July 1. Although flour sales have been light in recent weeks, millings have been better maintained in reflection of huge unfilled flour orders as of March 31. Moreover, reports of sharply reduced consumption of family flour since March 29,¹ when shortening was first rationed in combination with meat, suggest that grocers and other handlers of family flour may be left with larger stocks than had been anticipated.

More spectacular than the increase in domestic retention of flour has been the expansion in utilization of wheat for feed and for alcohol production (Chart 1). In 1942-43, for the first time on record, the wheat used for these purposes and for seed will reach a total about equal to that of mill grindings for actual domestic flour consumption. This situation is the result of a complex group of factors, including unprecedentedly large livestock numbers, price ratios favorable to feeding, price relationships that have encouraged the feeding of cattle and hogs to abnormally heavy weights in some areas, relative shortage of protein feeds, persistent strong holding of corn by farmers in spite of numerous governmental efforts to increase marketings, relatively small supplies of corn under loan or owned by the Commodity Credit Corporation (CCC), transport difficulties which have prevented a heavier movement of feed grains to this country from Canada, and special government programs for the sale of CCC-owned wheat for feed and alcohol production.

Early in the crop year Congress authorized CCC sales of 125 million bushels of wheat for feed at 85 per cent of corn parity. Roughly half of this quantity was sold before the end of December, and the rate of sale increased sharply during the following month and a half. On February 20 sales of such wheat were temporarily suspended to give the CCC time to determine the exact size of the small quantity remaining for disposal. This proved to be only 3 or 4 million bushels; and it was quickly absorbed in the few days following resumption of sales on February 25. Even

closely with domestic consumption of flour, this year the difference appears to be large. Even with allowance for growth of population and increased per capita consumption by millions of men in the armed forces and additional millions of new industrial workers, it seems improbable that more than about 109 million barrels of domestic flour—say 495 million bushels of wheat—should be actually consumed in this country and by our troops located abroad during 1942-43. The fact that domestic flour production, which totaled 105.1 million barrels through April, will almost certainly exceed 122 million by the end of June in spite of moderate purchases by the Food Distribution Administration (FDA) for lend-lease and other foreign shipments suggests that stocks of domestic flour will be abnormally heavy as of July 1, 1943.

Presumably a substantial fraction of those stocks will be owned by the military services, which have perhaps built up stockpiles abroad as well as at home. Flour stocks in

¹ *Northwestern Miller*, May 26, 1943, pp. 30-31.

before the last of this wheat was sold, Secretary Wickard asked Congress to authorize the sale of another 100 million bushels of CCC wheat for feed on the same terms. The requested amount was formally authorized (March 25), with price stipulations which in effect provided that wheat could not be offered for sale in the commercial corn belt at prices below the corresponding regional corn parities, but that in areas remote from the corn belt such wheat could be sold at prices equal to the national average parity price of corn and substantially below the regional parities.¹

Even at the new higher prices, the demand for CCC feed wheat proved heavy; increasing tightness in corn, with substantial sales rumored at prices considerably above the legal ceilings, contributed to this demand. Before the end of May feed-wheat quotas were exhausted and sales suspended by CCC offices. A small amount of the authorized feed wheat was held back by the CCC for later sale in areas facing feed emergencies, but most areas faced the prospect of being unable to buy cheap feed wheat during June. This stimulated the House agricultural committee to recommend emergency extension of the authority of the CCC to sell prior to July 1 at less than wheat parity another 50 million bushels of wheat for feed. This recommendation was promptly adopted by the House and Senate, and as of June 10 its early approval by the President is expected. We anticipate that CCC sales of feed wheat under special Congressional authorization of sales below parity will thus approximate 275 million bushels in 1942-43, that CCC sales of deteriorated wheat for feed may come to about 5 million bushels, and that a few million bushels more may be imported from Canada and distributed by the CCC for feed.

¹ Public No. 18, 78th Cong. The House Committee on Agriculture was informed by the president of the CCC that a loss of \$43,750,000 had been sustained on sales of the first 125 million bushels of wheat sold for feed.

² According to a report of the Wheat Alcohol Research Committee of the Chemical Division of the WPB in co-operation with the Department of Agriculture, 56 pounds of granular flour yield about 5.45 proof gallons of alcohol as compared with average yields of roughly 5 proof gallons per 56 pounds of corn and 4.6 proof gallons per 56 pounds of whole wheat. Millers' National Federation, *Milling around in Washington*, Jan. 23, 1943, p. 3.

In addition to the 280-85 million bushels of government-owned-or-imported wheat expected to disappear as feed this year, a substantial quantity of nongovernment grain has been fed on farms where grown and by small feeders in out-of-the-way places. July-March disposition data suggest that the amount of wheat fed outside of the government feed program this year will be smaller than it would have been in the absence of that program and smaller than reported for a number of earlier years. In any case, the total volume of wheat fed in 1942-43 will be unprecedentedly large, amounting to more than 350 million bushels. This forecast is about 150 million larger than the crop-year feed figure we were inclined to accept four months ago, before Congress had authorized the CCC to increase its original sales quota of 125 million bushels of wheat for feed.

Wheat utilization for alcohol production will be quite substantial this year, though decidedly secondary in importance to the use for feed. Sales of CCC wheat for distillation have tended upward in successive quarters of the crop year. During January-March 1943 such sales totaled 20 million bushels, or almost as much as in the two preceding quarters combined, and current indications are that April-June sales may be about twice as large as those of January-March. Since mid-December the use of granular flour for alcohol production has expanded sharply under the favorable contract terms allowed by the CCC. In January-March 7.8 million bushels of wheat were reported to have been ground in the production of 1.46 million barrels of granular flour, indicating an average extraction rate of 61 per cent. Since the beginning of April no government corn and little privately-owned corn has been available to distillers even at ceiling prices, and granular flour, offered for delivery at distillers' plants at prices per pound equal to the ceiling price of yellow corn, has been a much better buy.² Recent trade estimates suggest that CCC sales of wheat to millers for the production of granular flour are likely to average 8 million bushels or more per month in the last quarter of the crop year. Sales of whole wheat to distillers in April-June will presumably be appre-

ciably smaller, but nevertheless larger than in any of the three preceding quarters. It now seems reasonable to expect some 80 million bushels of wheat to be used for alcohol production during the crop year.

In total, domestic wheat utilization (including building of flour stocks) thus seems likely to come to over a billion bushels for the first time in history. The largest domestic utilization previously recorded was in 1931-32, when 753 million bushels of wheat disappeared in domestic channels, with almost 200 million going for feed as a result of low absolute and low relative wheat prices without the stimulus of governmental subsidy.

Net exports.—In contrast to the heavy disappearance of wheat within the United States this year, net exports (inclusive of shipments to possessions and on lend-lease account) will be relatively light and probably only a little larger than in 1941-42.

Through April subsidized export sales of wheat grain *from stocks of the CCC* totaled only half a million bushels (all in the early months of the crop year), while sales of grain for export under the subsidy program inaugurated last December came to only 6.65 million bushels, with the wheat destined mostly for Mexico.¹ The subsidy on wheat-grain exports remained at 30 cents per bushel until its final suspension after May 14. Three million bushels were reported sold to Mexico during the last few days that the subsidy was in effect, presumably bringing total sales under this program to about 10 million bushels.

The volume of subsidized flour sales is less easily estimated. Although the indemnity rate on flour exports was raised from \$1.25 per barrel through January 27, 1943 to \$1.60 the following day, to \$1.75 on February 11, and finally to \$2.00 on March 11, business was seriously restricted by the difficulty of obtaining cargo space for earlier as well as current orders. On April 16, the indemnity

rate on sales of flour for export to Cuba was suddenly raised to \$2.64 to remain in effect only until 700,000 barrels of flour could be sold or at the latest until April 29.² By April 26 the authorized quantity (designed to fill Cuban requirements to the end of the calendar year) had been sold, and the special subsidy was immediately withdrawn. These particular sales were made with assurances from the Department of State and the BEW that adequate shipping would be made available for delivery. They represented a net addition to earlier sales, which the FDA specified should be filled before any claim could be made on exports under the special \$2.64 indemnity. It may be reasonable to assume that during the current crop year sales of wheat flour to Cuba will approximate 1.6 million barrels, of which not over 1.2 million will be shipped before the end of June. If subsidized sales of flour to other Central and South American countries and to the West Indies should be about the same as last year, total shipments of subsidized flour may approximate 2.5 million barrels, or roughly 11 million bushels in terms of wheat.

In addition to the wheat grain and flour exported through April under announced subsidy plans, something like 2.8 million bushels must have gone (mostly as flour) to Hawaii, Alaska, and Puerto Rico; almost 9 million bushels were delivered in the form of grain, flour, and semolina for lend-lease shipment to Russia, North Africa, and other United Nations; and a substantial (though to us uncertain) quantity was shipped by the United States Army and perhaps one or more other government agencies for the civilian populations of French North Africa. News reports indicate that through April 7 the United Nations had sent 70,000 tons of wheat flour (3.7 million bushels of grain) to North Africa for civilian use.³ What portion of this was supplied by the United States is not clear; but it seems fair to assume that well over half came from this country. Army shipments of grain and flour for storage abroad for future relief purposes may also have been substantial, but on this point we have no evidence. In contrast, it is clear that flour shipments for current relief work and storage by the Office

¹ U.S. Dept. Agr. press release, 2287-43, May 5, 1943.

² This high rate was established "to fulfill a commitment of the Department of State and the Board of Economic Warfare to stabilize the price of flour landed in Havana for the remainder of the current calendar year." U.S. Dept. Agr. press release 2150-43, Apr. 16, 1943.

³ *New York Times*, May 12, 1943, p. 4.

of Foreign Relief and Rehabilitation Operations must have been relatively small through April, since reported purchases of flour by the FDA for lend-lease, government relief abroad (exclusive of army supplies used for such purposes), shipments to Alaska, Hawaii, and Puerto Rico, and stock-building by civilian government agencies totaled only 3.75 million barrels (say 17 million bushels) during July-April.

Before the end of the crop year United States gross exports of wheat and flour made from domestic grain may reach 35-40 million bushels. But against these must be set imports of perhaps 3 to 5 million bushels of Canadian wheat for consumption within the United States. Through March such imports probably did not reach a million bushels. But on April 21, the War Food Administration (WFA)¹ announced an initial purchase by the CCC of 7.25 million bushels of Canadian wheat for feed use in this country—primarily in New England and the Middle Atlantic states—and stated that additional purchases would be made from time to time as transport facilities became available for the movement of such wheat.² However, through May none of the government-purchased Canadian wheat appears to have been shipped. On April 29, the President issued a proclamation suspending the import quotas established May 28, 1941 “insofar as they apply to wheat and wheat flour purchased by the War Food Administrator or any agency or person designated by him.”³ Although this proclamation left the door open for imports by the WFA of wheat for human consumption, it seems highly improbable that any Canadian wheat will be imported for flour production for domestic use in the near future, except perhaps in connection with release of substitutable stocks of CCC wheat in different locations for use as feed. In any case, the aggregate flow of wheat from Canada to the United States seems likely to be severely limited by

¹ This new name came into use in April, shortly after the appointment of Chester C. Davis to assume the administrative functions formerly exercised by Secretary of Agriculture Wickard.

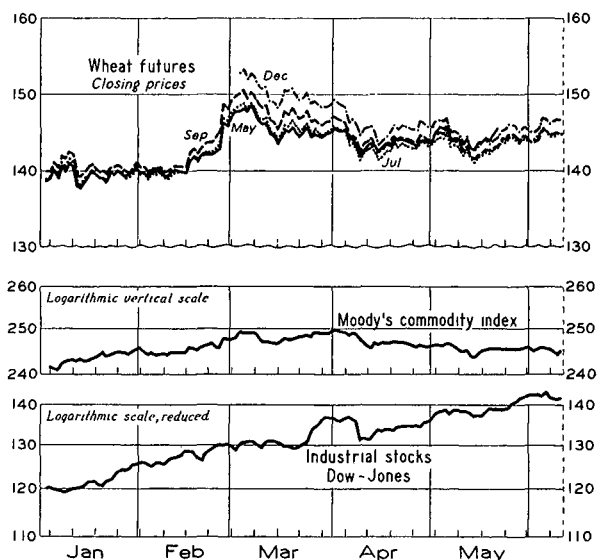
² U.S. Dept. Agr. press release 2183-43, Apr. 21, 1943.

³ *Federal Register*, May 4, 1943, p. 5693.

shortage of transport facilities—such shortage as has been sharply in evidence during the past two months.

Prices.—The course of Chicago wheat futures prices during the period under review is shown in Chart 2. As in other recent periods, legislative and administrative developments at Washington were dominant influences, though evidence of heavy domestic wheat disappearance contributed general strength, while fears of increased liquidation of loan wheat tended to restrict advances.

CHART 2.—CHICAGO WHEAT FUTURES PRICES, AND INDEXES OF COMMODITY AND INDUSTRIAL STOCKS PRICES, DAILY FROM JANUARY 1943*



* Data from *Chicago Journal of Commerce*; index of closing prices of 15 sensitive commodities, December 1931 = 100, compiled by Moody's Investor's Service; index of closing prices of 30 industrial stocks, compiled by Dow-Jones News Service.

The largest price movement of the period was the 8- to 10-cent rise that occurred from mid-February to March 4. Two factors were mainly responsible for this advance: (1) news that the CCC had exhausted its 125-million-bushel quota of feed wheat and that Secretary Wickard was requesting Congress to authorize the sale of another 100 million bushels for feed; and (2) apparently growing prospects that the Congressional farm bloc would be able to force the adoption of a higher monetary definition of price parity than was in

current use by the Administration.¹ On February 25 the Senate passed the Bankhead bill (prohibiting inclusion of governmental payments to farmers in calculation of price parity) by a vote of 78 to 2. If eventually adopted, this would force upward revisions of established price ceilings on bread, flour, and corn and a potential wheat-price ceiling some 23 cents per bushel above the level that seemed otherwise in prospect. These implications of the Bankhead bill stimulated flour purchases and encouraged farmers to withhold their corn from market at existing ceiling prices, thus contributing additional strength to the wheat market.

But the peak prices of early March were far enough above loan levels to hold the threat of large-scale redemption and liquidation of loan wheat, especially on any new advances. Moreover, the Bankhead bill made no further immediate progress, and flour sales fell off sharply. As a result, the peak prices of March 4-6 were not maintained, though throughout the remainder of the month Chicago futures fluctuated about levels only 3 cents below their recent peaks. Many observers still expected the Bankhead bill to be enacted, even though the chances for adoption of the Pace bill (requiring inclusion of farm wages in calculations of parity prices) were recognized as slight.² The wheat market was therefore depressed in early April when the Bankhead bill, vetoed by the President on April 2, was not immediately repassed by the Senate but was referred back to the originating committee for reconsideration on April 7. On the following day President Roosevelt issued his "hold-the-line" order, which was given a bearish interpretation in the wheat market as well as in other commodity markets and on the New York Stock Exchange (Chart 2).

Between April 9 and June 10 Chicago wheat prices have fluctuated within narrow limits, with only a slight upward adjustment in gen-

¹ For a discussion of this basic controversy, see our last survey of the wheat situation, *WHEAT STUDIES*, January 1943, XIX, 126-29.

² *Southwestern Miller*, Mar. 23, 1943, p. 35.

³ The new loan rate represented 85 per cent of a parity-price forecast of \$1.44 for mid-July. Since the parity announced for May 15 was \$1.44, traders had expected a higher parity to be forecast for July.

eral level. Price support was furnished by increasing evidence of heavy domestic utilization, pessimistic reports on the winter-wheat crop, and prospects for a 1943 loan rate 8 to 11 cents above the 1942 loan basis. On the other hand, bullish enthusiasm was held in check by fears of increased liquidation of wheat by farmers (especially prior to April 30), poor flour sales, and anticipation of the establishment of wheat price ceilings. Over the past week sudden Congressional action to increase CCC sales of wheat for feed by another 50 million bushels and renewed efforts to introduce a measure similar to the Bankhead bill were firming influences. But price gains were small, since the June official forecast of the spring wheat crop proved higher than generally expected and the loan rate announced for 1943 wheat was only \$1.22 (\$1.41 basis Chicago, No. 2 Hard or Red)—2 to 3 cents lower than many traders had anticipated.³ With current wheat prices at the principal terminals close to the new terminal loan values, traders are now anxiously watching for indications as to the volume of 1943 wheat that farmers will market directly rather than put under loan.

Price spreads between old-crop and new-crop futures and between cash wheat and futures changed markedly during February-May (Chart 2). In early February the Chicago July future was selling at a slight discount under the May, and the September stood about $\frac{3}{4}$ cent over the July. During the following three weeks of rising prices substantial positive carrying charges were established. By March 4, the July was $\frac{5}{8}$ cent above the May, and the September was selling $1\frac{3}{4}$ cents over the July. On the subsequent price decline, spreads narrowed, and before the middle of April the July future was selling at a discount of $\frac{3}{4}$ cent under the May. The carrying charge between July and September wheat continued to decline during May; and since the first of June the September future has frequently sold at the same level as the July.

These variations mainly reflected traders' changing appraisals of the volume of "free" wheat likely to be carried over into 1943-44 for which the incentive of carrying charges

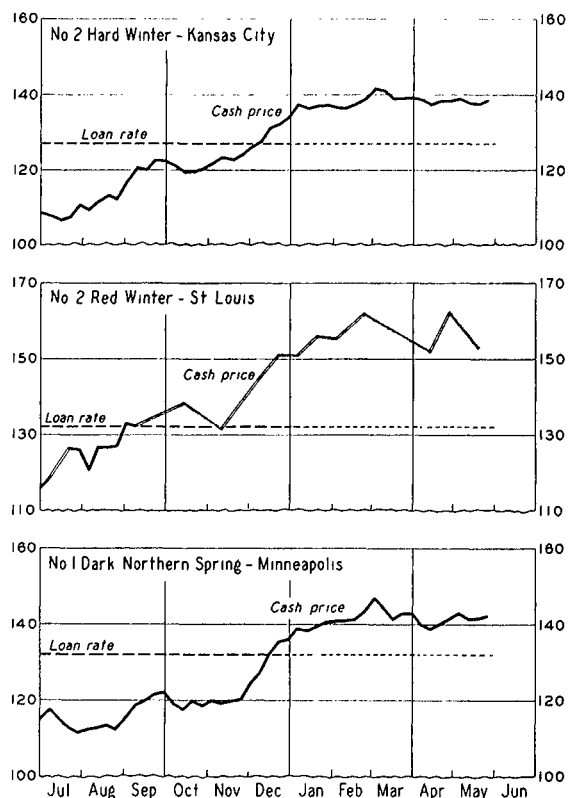
would be required. As wheat prices rose to a peak in early March, there seemed to be a fair prospect that redemptions of loan wheat would be heavy, thus swelling the volume of free wheat in the 1943 carryover. But as prices declined and it became known that loan liquidations had totaled only 10 to 15 million bushels weekly in March and considerably less in the first two weeks of April, traders became convinced that most of the warehouse-stored loan wheat would be taken over by the CCC when loans expired on April 30. So long as prices after that date could be kept from moving high enough to encourage redemption and liquidation of farm-stored loan wheat (on which 1942 loans would not expire until the spring of 1944), there was good reason to believe that the amount of free wheat in the 1943 carryover would be materially smaller than that available as of July 1, 1942. Moreover, an official report issued in early May indicated that the nation's grain-storage capacity had increased by some 67 million bushels between February 16, 1942 and April 1, 1943.¹ With grain stocks in Chicago and other terminal elevators shrinking rapidly, there seemed to be no need for substantial carrying charges to encourage wheat owners to carry the prospective moderate supplies of free wheat into the new crop year. This situation was in sharp contrast with developments in 1942, when terminal storage stocks were much larger in the late spring and the prospect for heavy movement from the new wheat crop threatened serious storage congestion in the summer.

Among the leading cash wheats, soft red winter remained relatively the strongest, and it alone sold at or above parity prices during the period under review (Chart 3). To relieve the prevailing shortage of eastern soft wheats, the CCC offered to sell its own stocks of such wheat and moved substantial quantities of soft white wheat from the Pacific Northwest to Eastern markets for sale at the parity price of soft red winter, basis Kansas

¹ U.S. Dept. Agr., Bur. Agr. Econ., *Grain Storage Capacity and Stocks, April 1, 1943*, mimeographed, May 10, 1943. The figures do not cover storage space on farms, bins owned by the CCC, or small feed stores in the North Atlantic states.

City, St. Louis, and Chicago. Although authorized to call outstanding loans on soft red winter and soft white wheat in Missouri and east of the Mississippi River, the CCC found it unnecessary to take this step, since farmers redeemed and marketed their soft wheats

CHART 3.—CASH PRICES AND CCC LOAN RATES FOR SELECTED TYPES OF UNITED STATES WHEAT, FROM JULY 1942*



* Cash wheat prices are weekly averages of the daily sales of the designated types. The following loan values for 1943 wheat at the principal terminals were just announced: Kansas City, No. 2 Hard—\$1.36; St. Louis, No. 2 Soft Red—\$1.41; Minneapolis, No. 1 Dark Northern—\$1.41.

freely at the prevailing high market premiums. In a couple of weeks soft red winter wheat at St. Louis sold at prices about 30 cents above the corresponding loan rate, but during most of the past five months premiums have ranged between 20 and 25 cents. At Kansas City, the price of hard red winter wheat rose to a peak in early March that was almost 15 cents above the loan basis, though it was more commonly only 10–11 cents above. In Minneapolis and Portland lower average premiums have prevailed for the principal

wheats—approximately 9 and 4 cents, respectively.

Throughout the period under review there has been continuous expectation of the establishment of wheat price ceilings; but to date none has been set. At one time a maximum price order for soft red winter wheat (currently selling above parity) was reported all ready for release, but even the issuance of that order was postponed.¹ The President's hold-the-line order of April 8 further complicated the already difficult problem of establishing reasonable price ceilings. This order was early interpreted to apply to agricultural commodities as well as others and to mean that existing ceilings on bread (set in May 1942) and on flour (effective from January 4, 1943 except for the increase for soft wheat flour in March) could not be raised. On the other hand, ceilings on wheat and other agricultural products could not legally be established at less than parity minus deductions for governmental payments to farmers; and members of the milling and grain trades were urging that no wheat ceiling be established below the level at which government-owned wheat could be offered for sale for flour production—namely, full parity. Should wheat price ceilings be established below full parity, the large holdings of the CCC would be effectively withdrawn from the market except as Congress authorized sales below parity or approved a general subsidy plan that in effect would be similar.

Whether, under such conditions, wheat farmers would market their grain freely enough to allow flour mills to operate without considerable inconvenience would depend in large part upon the relationship of the 1943 wheat loan values and the corresponding wheat price ceilings. A maximum price set too low with reference to the corresponding loan rate would mean that the bulk of the 1943 wheat put under loan would be delivered to the CCC in default of payment.

¹ *Southwestern Miller*, Apr. 27, 1943, p. 38.

² Indicated official forecasts through April based on information given in successive issues of the *Wheat Situation*. May forecast from the *Demand and Price Situation*, May 1943, p. 7.

³ U.S. Dept. Agr. press release, 2475-43, May 31, 1943.

Outlook for carryover and future supplies.

—Last December the United States Department of Agriculture forecast the 1943 wheat carryover at something like 825 million bushels. Since then, official forecasts have been reduced as follows: 707 million bushels in February, 650 million in April, and 600-625 million in May.² Our own forecasts have been reduced even more sharply to a current figure of 550 million bushels (*reported stocks*)—still a near-record volume. Presumably more wheat than usual will be carried over in unreported positions this year, since part of the 50 million bushels of feed wheat likely to be sold by the CCC during the latter half of June may be held in mixed feed inventories or in other positions not covered by the official stocks reports as of July 1.

While the exact size of this year's carryover must remain in doubt until July 1 stocks returns from farms, country and terminal elevators, and mills are finally assembled, the total is certain to be lower than the 632 million bushels reported in 1942. Probably about 375 million bushels of the 1943 carryover will be owned or held under loan by the CCC.

That a decline in year-end stocks should be registered during a crop year in which the wheat harvest almost reached a billion bushels is indeed remarkable. As indicated above, this reflected an unprecedentedly heavy demand for subsidized wheat for feed and alcohol production, added to a sharply increased demand for wheat for current flour consumption and the building up of flour stocks.

Impressed by the extraordinarily rapid domestic absorption of wheat and by prospects for continued heavy demands in 1943-44, Secretary of Agriculture Wickard in late February suspended the wheat marketing quotas for the current season and canceled the 1943-44 quota referendum scheduled for spring vote. At the same time, he announced that wheat farmers might exceed their wheat allotments for 1943 and still be eligible for AAA wheat payments and wheat loans provided that they fulfilled 90 per cent of their farm war-crop goals for the year. Even this 90 per cent requirement was relaxed for most farms by a ruling of the WFA at the end of May.³

In response to these changes in the gov-

ernment's position and to the generally bullish wheat situation, farmers apparently slightly increased their plantings of spring wheat for 1943. The area sown was nevertheless small in relation to most earlier years. Crop condition reports as of June 1 were officially interpreted to suggest a spring-wheat outturn of 229 million bushels, a winter-wheat outturn of 502 million, and a total harvest of 731 million.

A crop of this size would bring the total domestic wheat supplies for 1943-44 to about 1,280 million bushels—some 330 million less than the huge supplies for the current year and roughly 50 million less than those for 1941-42, but still the fourth largest on record. Such supplies would normally be considered excessive, but for 1943-44 they appear to be on the short side. This is due mainly to the fact that there is a prospective shortage of feed grains and protein concentrates for the record livestock population that is anticipated and needed next year to supply increased wartime demands for animal products. In recent months sales of subsidized wheat for feeding have been averaging 1.5 million bushels a day. If such wheat should continue to be offered freely for sale in 1943-44 and additional large quantities should be offered for use in the production of alcohol, utilization for these two purposes might easily exceed 500 million bushels. Under such conditions, the available wheat supplies would be virtually exhausted before the end of the year, and even essential working reserves for the summer of 1944 would be in jeopardy.

The new War Food Administration is thus faced with the task of allocating the wheat supplies of 1943-44 so as to bring about a maximum output of animal products without reducing year-end wheat stocks below a level that will insure the nation's food supply in the event of a poor harvest in 1944 or some later war year.

The first unquestioned claim on these supplies is the demand for flour for the nation's armed forces and civilian population. With other basic foods rationed and the level of physical exertion increased for the nation as a whole, flour consumption may be expected

to expand in 1943-44. Indeed, wise governmental officials will encourage this expansion—encourage the consumption of more bread and biscuits, more pancakes, more breakfast cereals, more macaroni. Foreseeing an increase in domestic flour consumption, the WFA recently requested the milling industry to be prepared to produce 25 per cent more flour in 1943 than in 1942.¹ We doubt that the increase in domestic consumption will be anything like as large as 25 per cent. On the other hand, it is undoubtedly desirable for the milling industry to be prepared to produce 25 per cent more flour, if needed, whether for normally expanded home consumption, for special emergencies associated with the war at home or abroad, or for suddenly expanded demands for lend-lease or relief shipments. If vital war materials and man power had to be diverted to the milling industry to make this preparation possible, there would be reason to question the advisability of such a goal. But a recent survey of milling capacity² indicates that this is not the case—that with minor adjustments and retention of existing staffs of trained workers, the milling industry is ready to meet wartime emergencies involving sharply increased demands for flour production.

A second irreducible claim on the wheat supplies of 1943-44 is the requirement for seed for the 1944 crop. WFA Administrator Chester Davis recently stated that an increase of 25 per cent in the area seeded to winter wheat for 1944 will be called for in the new agricultural goals to be announced in a few weeks.³ Presumably a similar or larger percentage increase will be asked for spring wheat, raising the total seed requirement for the crop year to perhaps 80 million bushels. Together with a very liberal allowance of 550 million bushels for net mill grindings, these two priority claims may be put at 630 million bushels, leaving about 650 million for feed, alcohol production, exports and shipments, and carryover (including reserves for wartime emergencies and for later relief shipments).

If the government should not offer to sell

¹ U.S. Dept. Agr., press release 2085-43, Apr. 9, 1943.

² *Southwestern Miller*, Mar. 30, 1943, p. 27.

³ *Ibid.*, May 18, 1943, p. 24.

wheat for feed at cut-rate prices in 1943-44, a substantial quantity would nevertheless be fed. The maximum quantity of unsubsidized wheat used for feed in any past year was 175-200 million bushels (in 1931-32). If the 1943 corn crop turns out no better than now expected, and no large new feed source (such as heavy imports) becomes available, a similarly large quantity of wheat might be diverted to feed in the coming year in the absence of a government wheat-feed program. In any case, official policies should allow for such a possibility.

Of the remaining 450 million bushels, 75 to 100 million should be counted as irreducible demands for alcohol production and net exportation and shipment to other countries. Conceivably, the WFA could immediately announce the discontinuance of wheat sales for alcohol production as from, say August 1, with provision against excessive purchases up to that date. But such a step would be inexpedient on several grounds, and in practice it will be feasible to do no more than gradually reduce the quantity of wheat going for alcohol production. During the last quarter of the present crop year something like 40 million bushels of wheat is expected to be used for this purpose. In 1943-44 as a whole, the quantity so used cannot be expected to be smaller; and, in view of the readjustments involved, it seems unwise to count on less than 50 million bushels.

With regard to net exports and shipments, the situation is less clear. If transportation facilities should be available, it would be simple for the United States to draw from Canada fully as much wheat as would be required to offset our domestic exports and shipments in 1943-44, even if these should prove substantially larger than in the current year. We do not have all the facts about the Canadian-United States transport position, but recent tightness has interfered with the shipment of the Canadian feed wheat purchased by the WFA in April. If such tightness must be counted a part of the future situation, our government officials would do well to allow at least 50 million bushels out of the 1943-44 domestic supplies for foreign trade demands. But if the transport position

should seem to warrant, no special allocation of domestic wheat would have to be made for our prospective wheat exports.

In any case, one could not reasonably count on more than 350 to 375 million bushels of domestic wheat remaining for year-end stocks and other disposition after providing for the priority demands specified above. Under such conditions, would it be desirable for the government to allot additional quantities of subsidized wheat for feed and/or alcohol production in 1943-44? The answer to this question depends on the amount of wheat that should be carried as year-end stocks in 1944. Too high a goal for stocks will mean an unnecessarily low output of meat and animal products in 1943-44 and the possible maintenance of an excessive wheat surplus to be carried into the postwar period. On the other hand, excessively low stocks hold the threat of food shortage in the event of a poor harvest—a threat not tolerable in wartime.

There is only one thoroughly satisfactory solution to this dilemma—a pooling of wheat resources by the United States and Canada. The United States would not have to carry wheat stocks of more than about 200 million bushels on July 1, 1944 if our government could count on drawing adequate supplies of Canadian wheat to meet future emergency needs in this country and to fill the commitments of the United States government for relief and lend-lease shipments abroad. The chief difficulty that seems to stand in the way of this solution is the apparent shortage of transport available for carrying grain from Canada to the United States. The seriousness of this shortage should be thoroughly investigated by American officials, and steps taken to overcome it in 1944 if not in 1943. If it is discovered that the United States cannot rely on transport of Canadian grain to this country to meet unusual domestic needs, there still remains the possibility that, in an emergency, Canada, Argentina, and Australia could be made the sources of wheat sent out to fill the foreign lend-lease and relief commitments of the United States. But until these various possibilities are explored, it would seem unwise for the WFA to permit diversion of extensive quantities of government wheat

to feed or to allow the present rate of absorption of wheat for alcohol production to continue. It is entirely conceivable (though on general principles unlikely) that before the present war ends the United States may harvest a wheat crop as small as 550 million bushels and at the same time face domestic needs for 800 million bushels or more. If Canadian imports cannot be counted on to meet such a deficiency, the United States must carry stocks large enough to insure its own future domestic wheat position.

CANADA

Marketings.—Up to June 3, 1943, marketings of the 1942 wheat crop in Western Canada were 212 million bushels, or 76 per cent of the quota of 280 million bushels. By the same time a year ago 85 per cent of the quota of 223 million bushels of 1941 wheat had been delivered. Congestion of terminal storage space and more restrictive individual marketing quotas than last year have been partially responsible for the slower deliveries. Last year all restrictions were removed by mid-December. This year the basic or minimum quota for bread wheats started at 5 bushels per "authorized" acre on August 1; it was raised successively to 8, 10, 12, and 15 on December 9, April 13, May 21, and June 9.

Special quota-delivery provisions have been applied to Alberta winter wheat and damp wheat.¹ Growers of durum wheat were at first allowed to deliver up to 14 bushels per authorized acre, but this provision only brought in about 3 million bushels. Consequently all restrictions on durum deliveries were removed in March, a measure which, combined with higher prices for durum wheat relative to other spring wheats, will probably bring in before the July 31 deadline almost all of the 6.8 million bushels produced by Western farmers in 1942. The previous general allowance of 40 bushels for family gristing has also been changed. Now any farmer with a quota of less than 14 bushels per authorized acre can count any amount of wheat for family

gristing as deliveries as long as ordinary deliveries plus those for family gristing do not exceed 14 bushels per acre. Relief for late threshers was liberalized so as to allow a farmer to borrow wheat for delivery if his own grain was only partly threshed; previously he could borrow only if his crop was immature and wholly unthreshed.² Finally, farmers who are joining or have joined the military forces (for full-time duty) are now permitted to over-deliver, applications being made by the farmer or by some other appropriate person in case of men overseas.³

Grain in store in visible positions has declined in the past four months, from about 500 million bushels in February to 428 million on June 3. At 367 million bushels, wheat visibles were then about the same size as a year before, but oats and barley visibles of 50 million bushels were five times larger. Much more wheat was stored on farms this year than last; the most recent report, for March 31,⁴ indicated 364 million bushels in 1943 as against 101 million in 1942 and 170 million in 1941, the previous peak. The harvesting of the new grain crops is bound to press heavily upon available storage capacity. For this reason the pooling of United States and Canadian wheat resources, and solution of problems of transport from Canada to the United States, assume additional importance.

Prices.—After a year of almost steady futures prices, the Winnipeg market suddenly showed considerable action in early March. In sharp contrast with the peaks concurrently reached by Chicago futures, the Winnipeg May future fell to 83¼ cents (United States currency), the lowest price of the crop year (Chart 4). The result was an extraordinary Chicago-Winnipeg spread of 64½ cents on March 3. This was 50 per cent greater than the 42-cent United States import duty—a relationship possible because of the embargo on imports—and probably the greatest Chicago-Winnipeg spread ever recorded. American speculative spread operations and reports of increased sales of Canadian wheat to European neutrals soon pushed the May up to 93½ cents, U.S., the highest point reached since July 1938. Although the Canadian Wheat

¹ See WHEAT STUDIES, January 1943, XIX, 129-30.

² *Northwestern Miller*, Feb. 17, 1943, p. 28.

³ *Winnipeg Free Press*, Apr. 8, 1943, p. 14.

⁴ *Crop Report No. 28*, Apr. 15, 1943, p. 3.

Board (CWB) was credited with selling some 25 million bushels¹ of May futures during the first half of March, the amount was not sufficient to keep prices from making a rapid advance.² By March 30, the Chicago-Winnipeg spread was reduced to 52 $\frac{3}{8}$ cents, a remarkably rapid adjustment. A wave of liquidation by American speculators, plus announcement of a special United States subsidy on

by 3 cents or more during February while both No. 1 and No. 2 Manitoba remained steady at 82 $\frac{1}{4}$ and 79 $\frac{1}{8}$ cents respectively (United States currency). By April 1 each grade was at least 11 cents above its minimum guaranteed price and the lower grades were 15 to 21 cents above theirs. These premiums were reduced during April but partially restored by the end of the month. During May the premiums again decreased, but were 7 cents or more for the different grades. In early June both No. 1 and No. 2 Manitoba reached successive new highs for the season. On June 9, the highest points to date were reached—93 $\frac{3}{8}$ and 89 $\frac{7}{8}$ cents respectively.

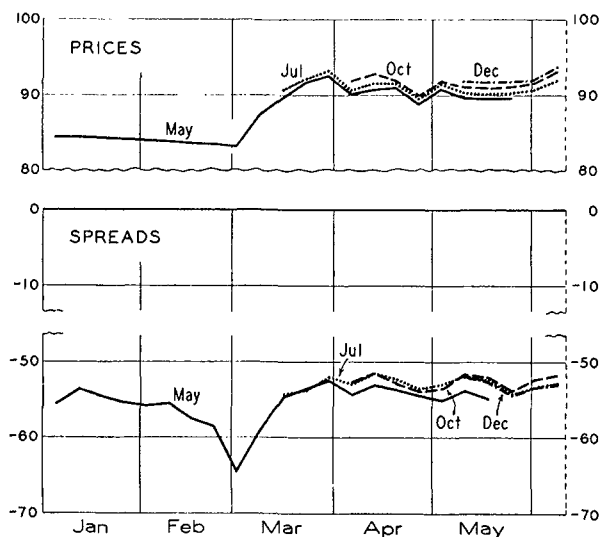
Utilization and supplies.—Canadian flour mills, working full tilt in the face of labor and material difficulties, are now booked up for several months in advance. If grindings should continue at 9 million bushels per month, about the average for the past few months, total grindings would amount to 106 million for the crop year. Of the flour from this total, probably over half will go to Great Britain, leaving perhaps the flour equivalent of 47 million bushels for domestic consumption. From September through April, more wheat has been ground in every month of this crop year than last, in spite of the fact that Great Britain lowered the white-flour content of her national bread this past winter.

Use of wheat for industrial alcohol, begun early in November 1942, will probably reach 4–5 million bushels by the end of the crop year. Some distilleries are using granular flour produced by a few Canadian mills.³

Feed use of wheat during 1942–43 may amount to 85 million bushels,⁴ 17 million more than the revised figure for 1941–42.⁵ Wheat shipped under the Freight Assistance Policy will probably amount to slightly more than the 12 million bushels recorded last year. By the end of April claims under the policy had been paid on 10.9 million bushels. In spite of abundant feed-grain supplies, wheat feeding has been stimulated by larger cattle and pig populations and gradually rising ceiling prices on beef.

United States interest in Canadian wheat is the most striking recent development in the Canadian market. Although the initial sale

CHART 4.—WINNIPEG WHEAT FUTURES PRICES AND SPREADS FROM CORRESPONDING CHICAGO FUTURES, WEEKLY FROM JANUARY 1943*



* Tuesday closing prices from *Grain Trade News* (Winnipeg).

flour to Cuba, brought Winnipeg prices down in April. Later, prices increased 3 or 4 cents when the CCC purchased 7 $\frac{1}{4}$ million bushels at Winnipeg on April 20, then fell back a few cents, and rose about 2 cents on President Roosevelt's suspension of wheat import quotas on April 29 (p. 208). Prices fluctuated 3 or 4 cents during May, but the net change for the month was slight. In early June futures were selling around 92 cents.

In the cash market, the lower grades rose

¹ James Richardson and Son, *Grain Letter*, Mar. 17, 1943.

² On March 13 the prohibition of short selling at Winnipeg was rescinded.

³ *Monthly Review of the Wheat Situation*, Feb. 26, 1943, p. 18.

⁴ *Ibid.*, May 28, 1943, p. 3.

⁵ *Crop Report No. 28*, Apr. 15, 1943, p. 2, and *Canadian Coarse Grains*, May 14, 1943, p. 13.

of 7¼ million bushels on April 20 will perhaps be followed by later sales, transportation difficulties will probably restrict American imports by July 31 to less than 10 million bushels. Navigation from Fort William and Port Arthur did not open until late April this year, about a month later than in 1942; and in early May United States vessels of more than 4,400 gross tons were ordered to carry grain only under permit in order to reserve larger vessels for shipment of iron ore. Early in June Canadian vessels were temporarily restricted to carrying wheat for British government account; however, space allocations on United States ships were sharply reduced for all commodities moving on the Great Lakes except iron ore and grain.

Reported sales of Canadian wheat to Eire, Portugal, and Switzerland during January-May amounted to about 5 million bushels. Relief shipments to Greece of 500,000 bushels per month have apparently been proceeding regularly. The Belgian government-in-exile, under an agreement made last December with Canada but only more recently disclosed, will receive 7 million bushels of wheat from Canada as soon as requested after part or all of Belgium is liberated. One-fourth of the total will be shipped within 10 days after request for shipment has been made, and the rest within two or three months.¹

The Canadian government has resumed publication of total wheat and flour exports. During the first six months of 1942-43 exports totaled 76 million bushels of wheat and flour in terms of wheat. As compared with the same period last year, exports were 30 million bushels less in spite of an increase in flour shipments this year. It now seems possible that exports during 1942-43 may not exceed 190

¹ *Monthly Review of the Wheat Situation*, Apr. 29, 1943, p. 3.

² See WHEAT STUDIES, January 1943, XIX, 149.

³ *Canadian Coarse Grains*, May 14, 1943, p. 11.

⁴ The conference met under the auspices of the Agricultural Supplies Board and determined goals for various crops and livestock products. The wheat acreage goal was determined indirectly by calculating other goals first and allowing wheat whatever acreage remained. See *Current Review of Agricultural Conditions in Canada*, November 1943, pp. 1-2; *Monthly Review of the Wheat Situation*, Feb. 26, 1943, p. 11.

⁵ *Crop Report No. 1*, May 10, 1943, p. 1.

million bushels, somewhat less than previously supposed.²

Exports of Canadian oats and barley to the United States from the beginning of August to June 3 amounted to 44 and 22 million bushels respectively; the bulk of this will presumably be fed in the United States. On April 6, 1943, a scheme was announced in the House of Commons whereby producers of oats and barley will benefit from the higher prices prevailing for coarse grains in the United States. Ceiling prices on oats and barley are to be maintained. The CWB, in issuing export permits for shipments of oats and barley to the United States, will charge an equalization fee representing the difference between Canadian and United States prices, less transportation costs, import duty and exchange costs, etc. The amount of the fee (applicable against exports to all countries) will be determined daily by the CWB, and the funds thus accumulated will be distributed on a pro rata basis to Western growers who deliver between April 1 and July 31, 1943.³

The Canadian carryover on July 31, 1943 will certainly be of record size. Total domestic utilization may reach the record figure of 162 million bushels, mainly because of heavy feed use. Wheat for seed will probably fall to 23 million, as compared with 29 million last year, if spring planting intentions are fulfilled. Domestic use of 162 million bushels plus possible exports of 190 million would leave as carryover 665 million bushels from a total supply of 1,017 million.

Crop of 1943. — Farmers' intentions to plant 16,486,100 acres of spring wheat point toward a probable reduction of 21 per cent in wheat acreage in 1943 as compared with 1942. This exceeds the reduction of 18 per cent called for by the agricultural conference of last December at Ottawa.⁴ The greatest percentage reduction seemed likely to occur in Alberta, with the other Prairie Provinces and Ontario not far behind.⁵ The 1943-44 wheat policy announced near the end of last January provided that the individual farmer's authorized acreage (65 per cent of acreage sown in 1940) was to be the same this year as last, but it was hoped that reductions would be greater. Intentions to plant spring wheat

combined with acreage sown to winter wheat last autumn indicate a possible total area of 17.09 million acres for the 1943 crop. This would be the lowest figure since 1917.

On April 9 the House of Commons passed an amendment¹ to the Wheat Acreage Reduction Act² which simplified the bonus system on acreage diverted from wheat production in the Prairie Provinces and parts of British Columbia. This year a payment of \$2 will be made for each acre diverted from wheat as compared with the acreage planted in 1940, regardless of what crop is planted. Last year different rates of payment applied, depending on the use made of the land. In no case will payments be made on more than 80 per cent of the total cultivated acreage, even though a farmer planted nothing but wheat in 1940 and plants no wheat at all this year.³

ARGENTINA

Despite a five-month drought up to early March which severely reduced the crops of corn and linseed,⁴ the 1942 wheat crop in Argentina was a moderately good one, especially in view of the small area sown. The official estimate of 235 million bushels stands practically unchanged since last December. The area sown, about 16.6 million acres, was the smallest since 1935 and 27 per cent below the peak in 1928. The yield of 14.2 bushels per acre sown, however, was high—the fourth largest since 1928. Outturns were relatively largest in the northern and eastern parts of the wheat belt, smallest in the southern and

western parts.⁵ The quality of the crop is exceptionally good.

Farmers are guaranteed 6.75 pesos per quintal for new-crop wheat, the same as for the 1941 crop. There has been no great rush of deliveries; except in cases of high yields, producers complain they suffer a loss.⁶ On February 5 the Grain Regulating Board (GRB) was authorized to sell inferior wheat for feed use in drought-stricken areas at its buying price.⁷

The GRB's domestic selling price also remains unchanged, at 9.00 pesos per quintal (roughly 73 cents, U.S., per bushel). In April the board made a slight change in its export prices. For 1941–42 wheat going to Europe and Brazil, the price was raised from 9.10 to 9.20 pesos per quintal, ex-dock, bagged basis; for exports to other destinations, from 9.50 to 9.60 pesos. These changes were apparently made in response to firmness in Canadian and United States markets.⁸ Another increase of .10 peso in prices on exports to Europe and Brazil was made late in May.⁹ Up to that time no report as to export prices for 1942–43 wheat had been announced.

Following the policy established for the previous crop, the Argentine government has forbidden mills to grind or use prior to November 30, 1943 any wheat of the 1942 crop.¹⁰ Control of millers' wheat stocks is maintained again this year by requiring millers to hold as much wheat on November 30, 1943, as they had registered on hand November 30, 1941. A miller short of such stocks at the end of November 1943 must either buy grain from the GRB at 9.00 pesos, or pay 2.25 pesos for every quintal in default. Millers' purchases are controlled by two regulations: (1) the GRB will only sell to a mill on the average as much wheat for domestic consumption as it registered as its average monthly milling for such consumption in 1939, 1940, and 11 months of 1941; and (2) mills are not to acquire more wheat for flour export than the average milled for domestic consumption.¹¹

Exports of wheat and flour from August through April 1942–43 reached approximately 53 million bushels, the lowest figure since 1920–21, except perhaps in 1937–38. The average level in 1934–35 to 1938–39 was 93 mil-

¹ *Winnipeg Free Press*, Apr. 10, 1943, p. 8.

² Assented to March 27, 1942.

³ *Winnipeg Free Press*, May 10, 1943, p. 16.

⁴ The corn crop, officially estimated in May as 76 million bushels, is the smallest since 1916 and compares with an average (1930–39) crop of 321 million. The linseed crop of 60 million bushels compares with an average (1930–39) of 67 million.

⁵ *Times of Argentina*, Jan. 11, 1943, p. 19.

⁶ *Monthly Review of the Wheat Situation*, March 1943, pp. 8–9.

⁷ *Situation in Argentina* (First National Bank of Boston, Buenos Aires Branch), Feb. 22, 1943, p. 2.

⁸ *Ibid.*, Apr. 26, 1943, p. 2.

⁹ *Winnipeg Free Press*, May 31, 1943, p. 16.

¹⁰ *Boletín Informativo*, Dec. 15, 1942, pp. 617–18.

¹¹ *Ibid.*, Dec. 15, 1942, p. 617.

lion bushels. It had been anticipated that exports might be enlarged by shipments to India in Argentine ships, which would return with burlap to meet the severe bag shortage and storage problem.¹ With improved prospects for the Indian wheat crop, however, the possibility became remote.

Shipments of wheat to Brazil and other South American countries during December–March accounted for 67 per cent of the total shipments of 20.7 million bushels—an even greater share than in July–November.² Brazil took 56 per cent and other South American countries 11 per cent. The United Kingdom's share fell from over 10 per cent in July–November to about 6 per cent in December–March, reflecting lack of sales in December and January and difficulty in obtaining ships. Spain accounted for 27 per cent of total shipments (about the same proportion as in July–November), and Sweden and Switzerland, the only other European countries for which figures are available, took less than 1 per cent.

As compared with last year, Brazil again ranked first in Argentine wheat shipments and Spain second. Shipments of only 1.3 million bushels to the United Kingdom during December–March were much smaller than in the corresponding months of the two preceding years and constituted only about 6 per cent of total shipments. The larger shipments to Spain amounted to 5.5 million bushels, about 3 million more than in 1940–41 and just about the same as in 1941–42. Reported Swedish shipments were 64,000 bushels in December–March, as compared with 320,000 in the same period of 1941–42.

It now appears that wheat and flour exports for August–July 1942–43 may reach

only 70 million bushels, a low figure compared with exports from 120 to 180 million in most years of the 1930's. With about the same acreage being planted this year as last, seed use will probably be 20 million bushels. Although some sales of wheat for feed were reported, rains in March decreased the demand. Corn continued to be fed heavily, despite the harvesting of a notably small new crop.³ Feed use of wheat in 1942–43 therefore appears likely to be small, and about the same as usual. This year, for the first time, an appreciable amount of wheat will be used as fuel. In May the Argentine Minister of Agriculture was authorized to allocate 4.8 million bushels for fuel purposes; presumably only part of this will be sold before August 1.

With no appreciable change in prospect for domestic milling use of wheat, total wheat disposition in 1942–43 may amount to 175 million bushels. Since total supplies for the year were 455 million bushels, stocks on August 1, 1943 may reach 280 million. This would be the highest level on record.

Seeding of the 1943 crop began in early April. It is expected that 16 to 17 million acres will be planted, about the same as in 1942 or a little more.⁴ However, this may not be possible unless the government manages to supply fuel for tractors and other farm machinery, as is contemplated. The rains which broke the drought in early March, though too late to save the corn crop, improved planting conditions for wheat and revived the pastures. Fears concerning a lack of forage are over. Surface moisture is reported as fairly satisfactory; subsoil moisture remains deficient.⁵ Rains in May were timely and seeding was then making good progress.⁶

AUSTRALIA

The estimate of the Australian 1942 crop, harvested last November–January, has been revised upward from 148 to 157 million bushels,⁷ the main change occurring in the estimate for New South Wales. The crop now ranks slightly above the 1934–38 average instead of slightly below it. As to crop quality, the f.a.q. standards as compared with those of 1941–42 did not change by more than half a pound per bushel in either direction, ex-

¹ For details of the storage problem see WHEAT STUDIES, January 1943, XIX, 135. It has been calculated that three ships making four round trips a year could bring back enough burlap to supply all the bags necessary for the next wheat crop. *Boletín Informativo*, Feb. 15, 1943, p. 68.

² WHEAT STUDIES, January 1943, XIX, 133.

³ The present level of corn supplies is in dispute in the absence of reliable evidence concerning stocks on farms.

⁴ *Winnipeg Free Press*, Apr. 9, 1943, p. 12.

⁵ *Ibid.*, May 6, 1943, p. 16.

⁶ *Ibid.*, May 20, 1943, p. 16.

⁷ *London Grain, Seed and Oil Reporter*, May 3, 1943, p. 437.

cept for New South Wales, where the standard fell from 64 to 63 lbs. It rose in Victoria and South Australia and fell slightly in Western Australia.

The area planted to wheat in Australia in 1942 was 9.6 million acres, the lowest since 1923 and 3.4 million below the 1934-38 average. This was 1.4 million acres less than the acreage licensed. In spite of reduced acreage and rationing of superphosphate fertilizer, the average yield of 16.4 bushels per acre was the highest ever recorded in Australia.

Farmers have complained of slow governmental payments. On the No. 5 pool (1941-42 wheat), only the initial payment of 3s. per bushel bagged has been paid, and that over a year ago. The guaranteed balance of 10d. per bushel (port basis) may be paid soon. On the No. 6 pool (1942-43), a farmer is guaranteed an advance at the rate of 4s. per bushel (farm basis) on his first 3,000 bushels from licensed acreage, 2s. per bushel on amounts from licensed acreage in excess of 3,000 bushels. Toward the end of February, only a little over half of the 134 million bushels marketed up to that time had been paid for at either rate.

Disappearance of Australian wheat domestically and as exports is not likely to be large enough in 1942-43 to preclude the accumulation of record stocks on August 1 next. Although Australia has presumably been supplying Allied troops as well as her own with foodstuffs, the number of troops supplied is not yet sufficient to increase Australian wheat grindings appreciably. Little wheat will be used for alcohol this year. The plant in New South Wales will probably start producing by the middle of 1943, the Western Australia plant by the end of the year, and the South Australia and Victoria plants shortly afterwards.¹ Eventually using 5 mil-

lion bushels to produce 12 million gallons of alcohol per year, these four plants will supplement the desired goal to be reached shortly—19 million gallons produced annually from sugar, molasses, and tar.² The amount of wheat diverted to feed at a reduced official price seems unlikely to add appreciably to the quantity normally fed, and the amount of seed used for sowing the crop of 1943 will again be exceptionally low in reflection of low acreage.

Export outlets for Australian wheat remain narrow. The remote possibility which arose in January that India might import very heavily, even up to 100 million bushels, has now disappeared (p. 229); and apparently only a few million bushels were imported from Australia. The Chilean government has been reported to be considering the purchase of 3 million bushels from Australia. Such an amount would not greatly change the probable exports for August-July 1942-43. The countries of the Middle East are in various states of distress as regards wheat supplies, but will apparently import little Australian wheat.

There is a possibility that some Australian wheat may be shipped as ballast to the United States for feed use. How much might be involved has not been disclosed, but apparently the CCC has found it difficult to obtain cargo space.³ No evidence of imports had appeared by the middle of June. Whatever the amount, it will probably come to California, where the prospect is for a small new crop, where less than half the amount of wheat needed in recent years for human and animal consumption⁴ has ordinarily been produced annually, and where the present feed situation is tight.

The Australian Wheat Board sold a total of 30 million bushels in January-April 1943 for domestic millings and foreign delivery, and held 207 million unsold on May 1.⁵ These figures seem roughly consistent with our earlier guesstimate that net exports during August-July 1942-43 may approximate 35 million bushels.⁶

With exports of 35 million bushels, stocks on August 1, 1943 may reach 210 million bushels. This would be the largest on record, even larger than the huge stocks of about 180

¹ *Commercial Intelligence Journal* (Ottawa), Feb. 27, 1943, p. 172.

² *Ibid.*, Feb. 6, 1943, p. 109.

³ *Northwestern Miller*, May 19, 1943, p. 44.

⁴ C. A. Suneson and F. N. Briggs, *Wheat Production in California* (University of California, Agr. Exp. St., Bull. 659, December 1941), p. 17.

⁵ Canada, *Monthly Review of the Wheat Situation*, May 28, 1943, p. 8.

⁶ *WHEAT STUDIES*, January 1943, XIX, 149.

million bushels on August 1, 1918.¹ Such stocks obviously imply an enormous exportable surplus, perhaps as much as 190 million bushels, or some 155 million more than Australia has been exporting annually in recent years.

The area now being sown for the Australian crop of 1943 will again be decidedly small. Western Australia is again limited to planting two-thirds of her "normal" acreage,² and further reductions have been in prospect in Victoria and New South Wales.³ In contrast to the generally declining area planted to wheat, an increase in Queensland is to be sought by means of "temporary farms." Not nearly enough wheat is grown in that state to meet local needs, and transportation difficulties have been such that at one time during the 1942-43 season there was only a little over a week's supply on hand.⁴ Shortage and strict rationing of superphosphate fertilizer, and special provisions for priority crops, are expected to promote reduction of acreage, and may also tend to lower yields per acre especially in Western Australia.

BRITISH ISLES

In the United Kingdom, wheat developments during the past four months have been dominated by the official policy of diverting more shipping to military uses. In furtherance of this policy new efforts were made to reduce the consumption of foreign wheat in favor of home-grown cereals and potatoes; wheat reserves and other food stocks were drawn down; and British farmers were again urged to plant as much wheat and barley as possible for harvest this coming summer.

To curtail wheat consumption, the Ministry of Food continued its "eat more potatoes" campaign, pursued its recently initiated pro-

gram to get millers to add substantial quantities of barley flour and/or oats flour in the production of National flour, and reduced the percentage of white flour permitted in National bread. The results of the "eat more potatoes" campaign are still in doubt. Apparently the consumption of potatoes increased considerably during the mild winter and early spring of 1942-43, but during the same time flour sales fell off little and remained relatively high.

More wheat has probably been saved by the gradual introduction of barley flour and oats products in National flour. On January 20, the Parliamentary Secretary to the Ministry of Food told the House of Commons that the composition of National flour was not and would not be standardized over the whole country, and that the proportion of home-grown non-wheat products then used in such flour varied in different areas but did not in general exceed 5 per cent. In early March it was reported that the use of barley had risen to 10 per cent in some districts;⁵ and it seems fair to infer that by June 1 the *average* percentage of non-wheat flour used was more than 5 but appreciably less than 10.

Between July 14, 1942 and February 20, 1943, British bakers were allowed to add as much as 12½ per cent of white flour to National flour for bread-making purposes.⁶ So long as domestic white flour was available, this system worked out fairly equitably as among the various bakers. But when domestic white flour was no longer available, the only bakers who could take advantage of this provision were those granted allotments of imported white flour—*i.e.*, those who had used such flour in prewar years. Because this led to dissatisfaction on the part of many bakers who had not previously used Canadian flour and because the Ministry of Food was anxious to reduce the amount of wheat used to produce a unit of the flour required for the National loaf, allocations of white flour to bakers were ordered discontinued from February 21. As from the same date, millers, who had formerly been permitted to use as much as 12½ per cent white flour in the production of National flour, were obliged to use no more than 7½ per cent. Thus the maximum percentage of white flour in any loaf of National

¹ See WHEAT STUDIES, October 1939, XVI, 64 and November 1939, XVI, 110-11.

² *Primary Producer* (Perth), Jan. 14, 1943, p. 1.

³ *Journal of the Department of Agriculture* (Victoria), December 1942, p. 614; *The Land* (Sydney), Apr. 16, 1943, p. 5.

⁴ *Primary Producer*, Feb. 25, 1943, p. 1.

⁵ *London Grain, Seed and Oil Reporter*, Mar. 12, 1943, p. 257.

⁶ The percentage allowed for "batch bread" in Scotland was twice as large.

bread (except in Scotland) was reduced from 25 per cent to 7½ per cent. This meant that the *minimum* weighted flour extraction rate permitted in any given loaf was raised from something like 81 per cent to almost 84 per cent. Although increase in the weighted *average* extraction rate for British National bread under this regulation was presumably less, a significant but not substantial saving of foreign wheat seems to be implied.

British imports of wheat and flour during August–April 1942–43 were probably the smallest in several decades. Through March, Argentine shipments of wheat to the United Kingdom totaled only 3.4 million bushels, some seven million less than the small shipments in the preceding year; Canada's total overseas exports of wheat and flour (destined mainly to the United Kingdom) were perhaps something like 35 million bushels less than in the same period last year;¹ and shipments from the United States and Australia to the United Kingdom were apparently almost negligible and several million bushels smaller than in the same months of 1941–42. The reduced imports reflected not only a record 1942 crop and conservation of wheat, but presumably also a draft upon Britain's earlier heavy war reserves of wheat. In a message to the House of Commons on February 11, Prime Minister Churchill stated that inroads were being made on the country's reserves of food and raw materials "for the sake of the military operations in Africa, Asia and the Pacific . . . for the sake of Russian convoys and for the sake of giving aid in food and supplies to India, Persia and other Middle Eastern countries."²

Some rebuilding of wheat stocks was probably effected in May, when British food imports were the largest for many months;³ and further additions may possibly be made in

June–July. But as of August 1, 1943, British wheat reserves seem likely to be somewhat smaller than they were a year earlier.

Since last December the outlook for Britain's coming wheat crop has considerably improved. An exceptionally mild winter made late sowings of winter wheat possible, and by early February the Minister of Agriculture was reported to be expecting the full increase of 600,000 acres in wheat plantings that he had requested. Weather conditions have been almost continuously favorable for crop development, though in the spring some fears were expressed that growth had been too rapid and in early May a sudden cold spell brought the first May snow that England had had in 24 years. The latest reports we have seen suggest that the 1943 wheat crop may be as large as or slightly larger than the huge crop of 1942. A bumper potato harvest is expected this year, and Britain's total outturn of food and feed crops will probably be larger than ever before.⁴ In 1943–44 producers of wheat, barley, and rye—the three designated bread grains—must offer to sell these crops and any mixtures wholly thereof to the Ministry of Food.

In Eire the outlook is also for a large wheat harvest in 1943. Official plans, which called for an increase in the wheat area from 575,000 acres in 1942 to 650,000 in 1943, seem likely to be fulfilled; and recent reports suggest that good yields per acre are expected. Over the past four months Eire has continued to draw small imports of wheat from Canada. Her imports in the crop year will be considerably below average size but nevertheless large enough, in view of the increased domestic wheat supplies, to prevent such year-end tightness in the bread position as Eire experienced last year.

CONTINENTAL EUROPE

No authoritative estimate of the European wheat crop has been issued to our knowledge since our January Survey. The Office of Foreign Agricultural Relations of the United States Department of Agriculture has stated, however, that wheat and rye production in Continental Europe in 1942 was considerably below average, but that the total grain crop came within 93 per cent of the 1933–37 level.⁵

¹ Monthly data on Canadian net exports of wheat, previously available only through May 1942, were published through January 1943 in the *Monthly Review of the Wheat Situation*, May 1943, p. 23.

² *New York Times*, Feb. 12, 1943, p. 4.

³ See statement by the First Lord of the Admiralty, *New York Times*, June 3, 1943, p. 2.

⁴ This is based on the statement of the Minister of Food reported in the *New York Times*, May 30, 1943, p. 5.

⁵ *Foreign Commerce Weekly*, Mar. 20, 1943, p. 3.

The same statement mentioned that the 1942 potato crop was larger than in any recent year and considerably above the 1933-37 average chiefly because of increased plantings. The appraisal of the 1942 crop in Continental Europe given in our January Survey is in close agreement with this statement.

Information from the European press that has come to our attention since January indicates that the 1942 wheat crop in the Danube area was even worse than it appeared to us then. This relates particularly to the Hungarian crop, which was appraised early in the season as somewhat better than the 1941 crop but which is now regarded as substantially worse.¹ Furthermore, later appraisals of the wheat crops in other Danubian countries appear to be somewhat lower than earlier ones. For this reason we slightly lower our January estimate of the Danube crop (see Table I), but we do not have new evidence which would affect our January appraisals of wheat crops in other countries of Continental Europe. This reduces our total for the 1942 wheat crop of the Continent from 1,300 to about 1,280 million bushels. The last crop thus appears to be about half way between those of 1940 and 1941, both of which were small.

Recent appraisals of the corn crop in the southern portion of the Danube area indicate that drought in August and September had damaged this crop to a greater extent than was suggested in January. Bulgarian crops were particularly damaged, but also the Rumanian.² As corn is the normal alternative

¹ Hungarian Minister of Supplies Szasz, speaking in the Parliament in justification of the lowering of the bread ration (effective Nov. 30, 1942 for a normal urban consumer from 200 grams to 160 grams daily, and for the farming population at about one-twelfth of the previous ration), announced that yield per acre in 1942 for wheat was 15.8 bushels as against 19.4 in 1941, and for rye 12.7 bushels against 15.4. *Neue Zürcher Zeitung*, Nov. 23 and Dec. 9 and 15, 1942.

² *Neue Zürcher Zeitung*, Nov. 13, 1942.

³ At the end of 1941 Hungary purposely lowered the extraction rate for wheat to 78-80 per cent in order to facilitate her feed situation by increasing supplies of bran (*Neue Zürcher Zeitung*, Dec. 5, 1941). The recent change places it above the level that prevailed before the reduction.

⁴ *Foreign Crops and Markets*, April 1943, p. 64.

⁵ *Neue Zürcher Zeitung*, Nov. 13, 1942 and Jan. 20, 1943.

for wheat in human consumption of this area, the simultaneous occurrence of poor crops for both grains indicates that the Germans have had very slight chance of supplementing their small bread-grain supplies from this source during 1942-43. The only way to do so was to force the Danubian people either to reduce their bread consumption or to reduce the quality of their bread below usual standards. Apparently efforts were made in both directions, as indicated by information on bread rations and on changes in the regulations as to flour extraction and admixtures to flour in the Danubian countries.

Bread rations and bread quality.—Hungary not only reduced the bread rations to a level unusually low for the dietary habits of her population, but also lowered the quality of bread by raising the extraction rates—for wheat from 82-85 per cent to 90 per cent, and for rye from 78-80 to 85 per cent. This change, effective from the end of last November, must also seriously reduce supplies of concentrated feed for animals, which were already strained during the preceding two years.³

In Rumania the minimum extraction rate for wheat was fixed at 90 per cent early in the fall, and there are indications that during the winter the government required flour mills to grind all bread grains at 100 per cent. Furthermore, it was required that 30 per cent of barley flour be mixed in bread flour, and of the remaining 70 per cent 10 per cent could be rye. Instead of barley flour, flour of potatoes, peas, beans, and other grains could be used. Further deterioration of Rumanian bread apparently took place in the spring, since according to a recent decree national bread flours in urban areas must now consist of 40 per cent whole wheat, 30 per cent barley meal, 10 per cent bean meal, and 20 per cent potato flour.⁴

In Bulgaria admixture of a large percentage of corn (up to 35 per cent) and of barley (20 per cent) was required in bread flour from early fall, and later corn was apparently replaced by an admixture of potato flour. There are statements in the press that in Serbia bread consists of two-thirds corn flour and one-third wheat flour.⁵

With such a degree of deterioration of bread in the normally wheat-surplus area of the Danube Basin, bread rations were apparently maintained, with the exception of Hungary, on the level at which they were fixed after the harvesting of the 1942 crop, though information is not quite clear in this respect. It is possible and even probable that in this way Germany was able to obtain certain quantities of wheat and other grains from the Danube area in spite of grain deficiency there. But the paucity of wheat in Germany itself, or at least the cautious use of it,¹ indicates that German wheat receipts from the Danube area this year, if any, must be small. Official denials that strict bread rationing was caused by exports to Germany are rather frequent in the Danube countries. For instance, it is officially stated that no bread grain was exported from the *old* territory of Hungary during the last two years, though it is not denied that wheat surpluses from the regions annexed from Yugoslavia are earmarked for Germany and Italy.²

Apparently bread rations were also maintained in those occupied countries whose rations were not assured by domestic supplies of wheat, such as Belgium and Norway. This means that Germany has supplied bread grain to these countries from her reserves or from the resources of some other occupied countries. A representative of the Finnish govern-

¹ The British Ministry of Economic Warfare says that no wheat flour has been used in bread in Germany since Feb. 1. *New York Times*, Feb. 25, 1943, p. 4; and *Corn Trade News*, Mar. 24, 1943, p. 115. We are not in a position to substantiate this information from German or neutral sources, and doubt its accuracy.

² *Neue Zürcher Zeitung*, Nov. 18, 1942.

³ *Ibid.*, Oct. 29, Nov. 1, 1942, and Jan. 8, 1943.

⁴ *Ibid.*, Feb. 5, 1943; advance release by OWI, Apr. 20, 1943.

⁵ *London Grain, Seed and Oil Reporter*, May 7, 1943, p. 454; and *New York Times*, May 8, 1943, p. 4; *News from Sweden* (American-Swedish Exchange, Inc., New York, mimeographed), May 26, 1943.

⁶ *Neue Zürcher Zeitung*, Feb. 19, 1943.

⁷ The OWI, in its advance release, Apr. 20, 1943, places the weekly bread ration of the normal consumer at 60 oz. If this figure is correct, it means a reduction of about 8 oz. a week from the previous level. But the United Nations Information Office, in its memorandum *Rations of the Nations* (mimeographed) issued also in April, gives the weekly bread ration for normal consumers in France as 68 oz.

ment officially stated that it was possible to raise the bread ration to 250 grams daily for the normal consumer from October 1942 because of the delivery of grain from Germany.³

In Greece, with the regular flow of Canadian relief wheat under Allied permission, bread rations were even somewhat improved, and now reach 192 grams per day for the normal consumer and 320 for the heavy worker. Relief work now is not limited to the city populations only, as it was earlier, but bread rations are also issued to the country population. The ration of the country population is, however, only three-fourths of that of the city.⁴

With the exception of Sweden, the neutral countries were able to continue their imports of wheat from overseas under *navicert*, as we anticipated in January, and presumably they were able to maintain their bread rations on the previous levels. This is substantiated by reports on exports of wheat from Argentina and on sales of Canadian wheat for European neutrals (p. 216). Swedish overseas commerce was suspended last January, when Germany terminated a safe-conduct agreement, but it is reported that since late May trade has been resumed following negotiations concluded at that time.⁵ But Sweden's supplies of bread grain were sufficient to maintain her ration until the new crop. Bread rations, introduced in Switzerland from October last, resulted in reduction of milling of bread flour.⁶ This suggests that bread rationing there not only stopped further increase in bread consumption, as planned, but even resulted in a reduction.

The bread-grain situation in France is not clear. Since the Allied forces landed in French North Africa, the imminence of a reduction of the bread ration in France has been announced repeatedly, but we have no knowledge that such reduction has yet taken place.⁷ However, it is clear that France will experience extreme difficulties in bridging the interval between the two crops, partly because of the reluctance of producers to deliver wheat to the government agencies. She may be forced to reduce bread rations before the end of the crop year.

As to the principal Axis partners, Italy ap-

parently maintained her small bread ration on the level established on November 16, 1942. At that time the daily bread rations of the youth (from 9 to 18 years of age) and of the manual worker were raised by 50 grams. This restored rations for these groups to the levels existing before the reduction of March 15, 1942. But the bread ration of the normal consumer was left on its low level of 150 grams daily.¹ By lowering the quality of her bread, Germany was able to maintain her bread ration on the level fixed October last. From June 1 she is apparently making a further shift in the direction of a vegetarian diet. The weekly meat ration is reduced from 350 to 250 grams, but the fat ration is raised by 50 grams and the bread ration by 300 grams. In spite of this substantial increase in the bread ration, the reshuffling of the rationed diet was motivated by necessity to safeguard supplies of grain and potatoes and to prevent the reduction of livestock resources.² An important part of the German agricultural plan for 1942-43, announced by Minister of Food Backe in November, is to restore the number of pigs and to strengthen the dairy herd.³

The 1943 crop.—Broadly speaking, this year's wheat crop in the European Continent may be expected to be larger than the small crops of the three preceding years. With the exception of some limited areas, weather generally favored autumn sowings; and the mild winter resulted in only slight damage to fall-sown crops, in contrast with the heavy winter-killings in central Europe and in certain other regions of the Continent during the preceding winter. The late and mild winter also provided a longer period for preparation of soil for spring planting. Hence it was possible, at

least in substantial degree, to fulfill plans for the expansion of crops, particularly the bread grains, in most countries in spite of the shortage of labor, draft power, and machinery that is characteristic of all belligerents and of most of the occupied countries of Continental Europe.

Drought in a portion of the Danube basin during August-September and early October delayed the beginning of the seeding campaign and endangered the fulfillment of the plans for seeding, especially in Rumania and Bulgaria. But abundant rains before the middle of October relieved the drought, and the mild weather in November and December made it possible to continue planting late in the season. In the middle of November planting in Rumania was still far behind schedule,⁴ but during the second half of November and December the fall cultivation was completed and the bread-grain acreage brought up to the official goal, according to information of the United States Department of Agriculture. In the spring efforts were made to exceed this goal.⁵

The Hungarian sowings of fall-sown crops, in spite of the delay due to the drought, were at least as large as the preceding year by the middle of November.⁶ Acreage sown to wheat in Bulgaria for the 1943 crop is apparently larger than in the preceding year, and the acreage of rye has also been increased. Wheat acreage in the Danube area for the 1943 crop must therefore be larger than the previous year's acreage, even though the autumn planting campaign was endangered early in the season by unfavorable weather.

Another area where weather did not favor the autumn sowings was Sweden and Norway. Here the late harvesting of the 1942 crop retarded fall sowing, and dry weather early in the season and wet weather later resulted in a very small winter wheat acreage for harvest in 1943.⁷ An early spring with weather favorable for spring sowing could, however, improve the situation.⁸

In all other countries of Continental Europe weather definitely favored both fall and spring sowings of wheat, and it may be assumed that the wheat acreage for 1943 exceeds that of 1942.

¹ *Neue Zürcher Zeitung*, Nov. 7, 1942, p. 3. The extra bread ration was limited to the winter months, and it expired at the end of March.

² *New York Times*, May 11, 1943.

³ *Neue Zürcher Zeitung*, Dec. 7, 1942; *Economist* (London), Apr. 24, 1943, p. 530.

⁴ *Neue Zürcher Zeitung*, Dec. 9, 1942.

⁵ U.S. Dept. Agr., Federal-State Market News Service, *Wheat Market Review* (San Francisco, mimeographed), Jan. 16, 1943; and *Grain Market Features* (Searle Grain Company, Winnipeg), Apr. 7, 1943.

⁶ *Neue Zürcher Zeitung*, Nov. 26, 1942.

⁷ *Grain Market Features*, Mar. 24, and Apr. 7, 1943.

⁸ *News from Sweden*, June 2, 1943.

Germany did not plan to expand her bread-grain acreage further, but sought only to bring it to the normal level, below which it had been reduced by unusually heavy winter-killing in 1942. There are indications that Germany would be able to reach that goal, as she was successful last fall in bringing into agriculture a large number of foreign civilian workers, mainly from the occupied area of the USSR.¹ Italy planned to increase her wheat acreage for the 1943 crop by about half a million acres,² and it may be inferred from comments in the European press that the planned grain areas were actually reached and perhaps exceeded in some provinces. The French autumn sowing of wheat, although somewhat below expectations, has apparently exceeded the sowing of the preceding year.

The countries greatly deficient in wheat, both occupied and neutral—such as Belgium, the Netherlands, and Switzerland—continued their efforts to expand their crop areas further. According to semiofficial estimates, in 1941 Belgium cultivated an area exceeding that of 1938 by about 60 per cent, and planned to plow up at least 20 per cent of her grassland in 1942 and 1943 in order to expand it up to 75 per cent above the prewar level.³ A large part of this expansion consisted, of course, of wheat. The Netherlands has expanded her grain area since the beginning of the war to about the same extent, and planned to convert a considerable additional area of pasture into fields in 1942–43. The 1942 cultivated area in Switzerland was about 750,000 acres (80 per cent) larger than at the beginning of the war, and the plan was to add another 125,000 to 150,000 acres in 1943. It is

true that the Swiss expanded their potato and feed-grain areas proportionately more than the bread-grain area, but the latter, particularly the wheat area, made up the bulk of the total crop expansion.⁴

The increased grain acreage in Continental Europe does not necessarily mean a larger wheat crop. Weather developments during the growing season and such factors as lack of certain kinds of fertilizers and the quality of cultivation under shortage of labor and draft power may be decisive. As to the first, weather not only facilitated sowing campaigns, but also favored growing crops in most regions, and the fall-sown crops entered the winter under better conditions than in recent preceding years. The mild winter of 1942–43 damaged fall-sown wheat very little, and generally speaking wheat crops appeared from under the snow in good condition throughout the Continent. The only exception was apparently some of the early-sown wheat planted under drought conditions in the Danube basin. Official Hungarian crop reports describe these crops as scanty and irregular, and it may be that the early spring was rather dry in this area. Yet, the spring outlook for the wheat crop in the Danube basin was also brighter than a year ago. Crops here, however, are more vulnerable than elsewhere to summer drought, and in the second half of May the press carried comments that crops in southern Europe were threatened if rain did not come soon. This threat may have been removed, since later news mentioned rains in Rumania.⁵

Hence, at the end of May, the wheat crop of Continental Europe ex-Russia perhaps promised better than any since the war began.⁶ It is true that at the same time there were reports that unseasonably cold weather had recently retarded growth of some crops in Europe; but crops in central and western Europe are much less vulnerable to further weather development than are wheat crops in southeastern Europe, and radical changes in the crop outlook in these areas can hardly be expected.

It is difficult to appraise the possible effect on the current crop of the shortage of phosphate and, to a certain extent, of nitrate fer-

¹ *Economist*, Apr. 24, 1943, p. 530. The author of the article concludes that German agriculture "is actually saturated with labor," although the productivity must be low. During the winter months part of this labor force was transferred to war industries, but measures were planned to place the necessary labor at the disposal of agriculture in the spring. See *Neue Zürcher Zeitung*, Dec. 7, 1942.

² *Neue Zürcher Zeitung*, Dec. 1, 1942.

³ *Economist*, May 1, 1943, pp. 554–55.

⁴ *Neue Zürcher Zeitung*, Jan. 5 and Feb. 18, 1943.

⁵ *New York Times*, May 18, 1943, p. 10; *Wheat Market Review*, June 5, 1943.

⁶ Canada, *Monthly Review of the Wheat Situation*, May 28, 1943, p. 1.

tilizers, which is more acute this year than last. Plans were made to compensate for smaller supplies of fertilizers by more intensive preparation of the soil.¹ We do not know how far these plans could be realized in Germany under conditions of shortage of draft power and machinery and a large proportion of inexperienced labor on farms. Hungary reports officially, however, that farmers undertook deep fall plowing to an unusually great extent because of premiums paid, and that last fall the soil was prepared for spring sowing to an extent never reached before. Under such circumstances, it is not likely that deterioration of cultivation and shortage of fertilizers will completely offset the influence of favorable weather on the current crop, if it continues.

Very little news reaches us on the situation in the occupied areas of the USSR, and it is therefore difficult to appraise the possibilities that Germany may obtain additional bread grain from this source in 1943. Reports of the German and German-controlled press from this area concerning the extent of the autumn sowing were rather optimistic; and apparently this was not mere propaganda.² It was reported that in the northern and the middle regions of the occupied area the fall sowing was completed under favorable conditions and that 40 per cent or more of the available arable land was sown to winter rye, while winter wheat was restricted to particularly favorable places. It was also reported that autumn planting was completed successfully in the more southern region of Ukraine, though sowing there was difficult because of long autumn drought. This indicates that the fall sowing in Ukraine could not be as successful as in the northern occupied area, and

the wheat crop there, like that in the Danube basin, is vulnerable to a possible drought during the summer.

SOVIET RUSSIA

News on the food and crop situation in Soviet Russia is scanty as usual. It may be inferred, however, that the recapture of practically the entire North Caucasus, the Don area, and the eastern tip of Ukraine temporarily made the food situation in the USSR only more difficult than before, as we foresaw in our January Survey. Witness the recent statement of the Chairman of the Russian delegation to the Food Conference that Soviet Russia "is chiefly concerned with getting more lend-lease food *right now* for the Russian army and its civilian population of areas liberated from Nazi rule."³ Tangible confirmation appears in increasing shipments of lend-lease food to Russia. According to Stettinius' reports, January shipments of food to Russia were one-fifth larger than in December, and February shipments 30 per cent higher than during January. The same report mentions that in 1943 more than half of all lend-lease food shipments are expected to go to the USSR.⁴ President Roosevelt's report on lend-lease through April 30 indicated that still more emphasis would be put on food shipments to Russia from now on, and that this year food would have a priority on a par with planes and trucks on Russian-bound vessels.⁵

The outlook for food in the USSR during the next crop year is much more uncertain. The territory recaptured by the Soviet army last winter enlarges the possible crop area of the USSR by some 50 million acres, but presumably very little of the winter crops—rye in the north and winter wheat in the southwest—had been sown under German control before the recapture. Furthermore, the autumn of 1942 was dry in the southeast. In the neighboring Saratov province of the Volga region, the drought was so severe that a considerable fraction of the winter crops, mainly rye in that province, did not germinate at all, while much of what germinated in September was killed by further drought later.⁶ Generally speaking, a proportion of the total

¹ *Economist*, Apr. 24, 1943, p. 530.

² *Ibid.*, Feb. 27, 1943, p. 270.

³ Russel Porter in *New York Times*, May 25, 1943, p. 1 [italics ours].

⁴ *Ibid.*, Jan. 26, Feb. 20, and Mar. 13, 1943.

⁵ *Ibid.*, May 26, 1943, p. 15.

⁶ This information was revealed by Riazanov, Director of the Grain Institute of the Southeast, during the discussion at the session in Moscow of Lenin's Academy of Agricultural Sciences, Dec. 12 to 17, 1942. See the Russian monthly *Socialistic Agriculture*, January-February 1943, p. 45.

crop area much larger than usual had to be sown in the liberated area in the spring, and energetic preparations for the sowing campaign were under way early. American newspapermen reported that trainloads of machinery, seed, draft animals, and other necessary supplies were moving toward the liberated areas.¹ But the spring seeding season is very short in the southeast, particularly under drought conditions; and it would be extremely difficult to complete the campaign satisfactorily in the recaptured area under the conditions of destruction and devastation left by military action. Even if moisture in the spring and summer is sufficient—and we have no information concerning this—a full-sized crop in this area can hardly be expected this year.

As to the crops in the territory held by the Russians last fall, it is possible to say that the fall-sowing campaign was successfully completed. Commissar of Agriculture Benedictov, in his report at the meeting of the Lenin Academy, stated that winter crops in 1942 were sown on 6 to 7 million acres more than in 1941.² But he also said that further increase of production in 1943 must be achieved mainly by raising yields per acre rather than by expansion of acreage. Presumably existing resources of tractors, other machinery, and trained operators, much depleted by war, are only sufficient to complete the spring sowing on the usual acreage in the territory held by the Russians last fall, and to seed in the spring as large an acreage as possible in the territory recaptured from the Germans. Consequently, all decrees and orders relating to the spring planting campaign of 1943, in contrast to those of 1941 and 1942, put emphasis on raising yields and not on expansion of areas.³ The task of spring sowing is made still heavier because fall plowing was apparently less than usual, as may

be inferred from the attention given to the problem of planting on land that must be plowed in spring.⁴ This must inevitably result in hasty work that may lower the quality of cultivation. Accordingly, the problem of the invasion of fields by weeds acquires great importance and attracts great attention in Russia. All these factors considered, together with the moisture deficiency last autumn in the important wheat region of the Volga, it must be concluded that the Russian wheat crop this year, as well as grain crops in general, depends more than usual on weather developments during the spring and summer. The crops in the Volga region and in the southeast, like those in the Danubian regions and apparently those in southern Ukraine, are particularly vulnerable this year to possible drought.

OTHER COUNTRIES

Information as to wheat and food developments in most other countries continues fragmentary. Broadly, the picture for the past few months seems to be one of improvement—but of relatively slight improvement at a low level of consumption.

In French North Africa, civilian food supplies have remained short, though supplemented by substantial shipments from Great Britain and the United States. Included in reported shipments through April 7 were 70,000 tons of flour,⁵ and wheat grain valued at \$200,000.⁶ In terms of grain, these shipments probably represented something like 3.85 million bushels, and during April–June the arrival of additional flour and wheat shipments may bring the total to perhaps 5.5 or 6.0 million bushels. Gross imports of this magnitude would presumably not cause French North Africa to rank as a net importer for the crop year, since more wheat than this had apparently been exported to France prior to the Allied invasion in November.

The general food situation in North Africa has probably been improved less by direct importation of grain and flour than by the indirect effects of larger tonnage imports of textiles, production equipment, and such desired products as sugar, canned and powdered milk, tea, and soap. These, offered for sale

¹ See correspondence by Ralph Parker from Moscow in the *New York Times*, April 11, 1943, p. 13.

² *Socialistic Agriculture*, January–February 1943, p. 35.

³ *Economist*, Mar. 13, 1943, p. 329.

⁴ *Socialistic Agriculture*, January–February 1943, pp. 35–39, 44–46.

⁵ *New York Times*, May 12, 1943, p. 4.

⁶ Included in Stettinius' report on lend-lease shipments through March 31.

in the cities, have stimulated producers to market some of their hoarded grain (both wheat and barley) in order to buy the cloth and luxury foods they want so badly and have gone so long without. Yet the increased supplies of grain, available from imports and expanded domestic marketings, have not been large enough to meet current demands without resort to rationing in some of the cities. Only for Tunis have we seen a recent bread-ration figure: there, some weeks before its fall to the United Nations on May 8, bread was reportedly rationed, according to one news dispatch, at 180 grams (6 ounces) per day.¹ More recently, another source reported that after United Nations forces occupied Tunis, the bread ration was raised from 250 grams (9 ounces) per day to 500 grams (18 ounces).²

We assume that the bread and general food positions of all three of the countries of French North Africa will be greatly improved after mid-June as the new grain crops and other foods move to market. Morocco is said to be expecting a bumper wheat crop, and prospects for grain harvests in Algeria and Tunis are apparently fair to good. Indeed, in 1943-44 North Africa is likely to be an important asset to the United Nations as a food-surplus area.

Egypt has been in a better position with respect to food this year than most neighboring countries. The 1942 Egyptian crops of barley, millet, and corn were all of record size and the rice crop was large. These more than compensated for a moderate wheat harvest and an increased demand for bread and other foods by the low-income classes. Governmental policy has been directed toward stretching grain supplies through maintenance of stringent milling and admixture regulations, and toward the collection and storage of substantial stocks of wheat. It seems probable, though by no means certain, that Egypt has supplied the wheat for the bulk of the bread requirements of the British army in North Africa, and that a substantial

portion of the sizable year-end wheat stocks in Egypt will be owned by one or more of the United Nations.

Short grain crops in 1942, hoarding, speculation, and inadequate governmental controls over food distribution resulted in the emergence of critical food problems in other important Middle Eastern countries in the late fall and early winter of 1942-43. Conditions were apparently worst in Iran, but bad also in Turkey. In both of these countries bread has been rationed in the principal cities in quantities below usual consumption levels. In Istanbul the bread ration for "normal consumers" was reduced last December from 375 grams (13 ounces) a day to 300 grams (11 ounces); in Teheran the "normal" ration has apparently been maintained at 400 grams (14 ounces) per day. In both cities heavy workers have been granted rations twice as large as those for normal consumers. Throughout the Middle East bread has been made this year from high-extraction wheat flour mixed with substantial portions of flour from barley and other coarse grains. In Turkey the common flour admixture at the beginning of the year was reported to be 30 to 40 per cent barley, maize, bean, or soybean flour.

Imports of food into the Middle East countries have been mainly arranged and controlled since April 1941 by the Middle East Supply Centre, whose headquarters are at Cairo.³ During its first year of operation, this organization reportedly diverted 600,000 tons (22 million bushels) of wheat to the Middle East. We infer that the imports arranged for the current crop year have been less than half as large, though this is by no means certain. Incomplete information suggests that Turkey has probably received something like 4 million bushels of imported wheat since last August and Iran some 1.5 million (over half from the USSR). Further significant shipments of wheat have probably gone to Iraq, Syria and Lebanon, and Palestine, though these countries, faced with less serious food shortages than Turkey and Iran, have presumably been allocated imports of smaller volume. On the other hand, Iran might have secured larger grain shipments during 1942-43 if the government had taken earlier and

¹ *New York Times*, Apr. 6, 1943, p. 5.

² *London Grain, Seed and Oil Reporter*, May 13, 1943, p. 475.

³ For a brief description of the operations of this organization, see *Economist*, Mar. 13, 1943, p. 320.

more effective steps to control the internal distribution of food.¹

Increased wheat shipments to Turkey after December 1942 resulted in relaxation of some of the major restrictions on bread and flour consumption there. In February existing limitations on the sale of flour were removed; and for some weeks consumers were permitted to purchase more bread than their ration coupons allowed, with the additional bread available only at higher prices.² Later, shortage of grain resulted in the withdrawal of the latter measure.

Recent reports from the Middle East suggest that the 1943 grain crops will be large and perhaps even of bumper proportions. This should go far toward improving the general food situation and should also reduce demands for food imports in 1943-44.

India's food situation, critical last January, has improved markedly over the past five months. In response to increasing food shortages in some of the principal cities in December-January 1942, the Indian government adopted a three-point program to combat hoarding and speculative holding and to increase available food supplies: (1) the legal maximum prices on grain were canceled effective January 25 in the hope of stimulating domestic grain marketings; (2) officials promptly announced that arrangements had been made to import substantial amounts of Australian wheat for government-controlled distribution at reasonable prices in the deficiency areas; and (3) embargoes were placed on food exports from India, effective March 1943. These measures proved quite effective, perhaps in large part because of steady improvement in the outlook for 1943 food crops. Domestic marketings of grain were so sharply increased during February-March, and the distribution of food was so improved under partial governmental supervision, that it became unnecessary to import more than a few million bushels of wheat from Australia. The exact size of these imports has not been made

¹ *Ibid.*, Feb. 20, 1943, p. 230.

² *Corn Trade News*, Mar. 31, 1943, p. 126; *ibid.*, Apr. 21, 1943, p. 146; *Foreign Commerce Weekly*, May 15, 1943, p. 7.

³ *Corn Trade News*, Feb. 24, 1943, p. 71.

known, but available evidence appears to support the "rumor" published by Broomhall in February that Indian imports of Australian wheat would not exceed 80,000 tons (2.9 million bushels).³ This represented a big reduction from the 100-million-bushel import "rumors" circulated earlier.

With the harvesting of a record wheat crop (now estimated at 409 million bushels) in March-April, and with increasing indications that Indian peasants have responded to the Government's "grow-more-food" campaign by planting somewhat more land to the principal crops, the outlook for India's food position in the coming year is considerably better than most observers dared hope five months ago. Even food prices, which advanced sharply during January-February, have recently tended to decline. On the other hand, the situation has not developed equally favorably in all of the different provinces. Probably the most adverse developments have been witnessed in Bengal, where the harvests of the past few months have been only fair and a serious rice shortage has continued to threaten the large coastal cities, normally heavily dependent on rice imports from Burma.

In China, famine persisted in Honan, Kwantung and other provinces of Free China well into the spring of the year. Even at Chungking the shortage of certain types of food became so great that officials introduced rationing of meat, sugar, and cooking oil effective March 15. Since Free China has not been in a position to import significant quantities of food, no relief has been forthcoming from the United Nations for the starving millions in this allied nation. Current hopes for improvement are fixed on the somewhat better present outlook for China's 1943 food crops; but it is still too early to be certain that an increase in total output will occur.

In the Americas, Brazil has retained her recent rank as the second largest wheat importer of the world. Through March, Argentina reported shipments of about 22.0 million bushels of wheat to Brazil this year, as compared with 23.8 and 20.2 million respectively in the corresponding periods of 1941-42 and 1940-41. Chile harvested a below-average wheat crop in December-January and is expected to

import 2 or 3 million bushels of wheat during 1943. Although Chile ordinarily draws her imports from Argentina, she was reported in March to be considering the importation of 80,000 tons (2.9 million bushels) from Australia.¹ Uruguay apparently harvested a good-sized wheat crop last December despite the beginning of a severe drought which sharply reduced the output of feed grains and forage crops. It is possible that Uruguay will divert some of her surplus wheat to feed this year, but she is more likely to increase domestic

¹ *London Grain, Seed and Oil Reporter*, Mar. 22, 1943, p. 290.

flour consumption and to send small exports to nearby Latin American countries. In North America, Mexico purchased more import wheat during August–May 1942–43 than in any other year on record. Even though part of the 9 to 10 million bushels purchased may not be moved into the country before August 1, Mexico's imports for the crop year will be unprecedentedly large. Added to a domestic crop of near-record size, they will bring Mexico's total supplies of wheat to a new high level in 1942–43. These will go partly to swell domestic flour consumption and perhaps partly to build up year-end wheat reserves.

This survey was written with the collaboration of Rosamond H. Peirce and with special assistance from Alice R. Gosline. The charts were prepared by P. Stanley King. The writers are indebted to M. K. Bennett and J. S. Davis for helpful criticisms and to the Office of Foreign Agricultural Relations of the United States Department of Agriculture for certain foreign information.

APPENDIX TABLES

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS EX-RUSSIA, 1937-42*

(Million bushels)

| Year | World ex-Russia ^a | Four chief exporters | | | | | British Isles | Continental Europe ex-Russia | | | | French North Africa ^d | India | Others ex-Russia ^e |
|-------------------------|------------------------------|----------------------|---------------|--------|-----------|-----------|---------------|------------------------------|----------------------------|------------------|---------------------------|----------------------------------|-------|-------------------------------|
| | | Total | United States | Canada | Australia | Argentina | | Total | Four neutrals ^b | Others ex-Danube | Lower Danube ^c | | | |
| 1937..... | 3,809 | 1,449 | 874 | 180 | 187 | 208 | 63 | 1,473 | 156 | 955 | 362 | 72 | 364 | 388 |
| 1938..... | 4,563 | 1,814 | 920 | 360 | 155 | 379 | 81 | 1,778 | 149 | 1,163 | 466 | 72 | 402 | 416 |
| 1939..... | 4,195 | 1,603 | 741 | 521 | 210 | 131 | 72 | 1,621 | 162 | 1,008 | 451 | 100 | 372 | 427 |
| 1940..... | 3,917 | 1,735 | 813 | 540 | 83 | 299 | 75 | 1,225 | 111 | 819 | 295 | 62 | 401 | 419 |
| 1941 ^e | 3,926 | 1,649 | 943 | 315 | 167 | 224 | 90 | 1,360 | 138 | 882 | 340 | 80 | 374 | 373 |
| 1942 ^e | 4,165 | 1,966 | 981 | 593 | 157 | 235 | 125 | 1,280 | 150 | 860 | 270 | 65 | 376 | 353 |

* Largely official data, for boundaries as in 1939; figures in italics represent or include in substantial part unofficial approximations.

^a Excludes USSR, China, Iran, Iraq, Transjordan, and various small producers, but includes Brazil and Peru.

^b Spain, Portugal, Switzerland, Sweden.

^c Hungary, Yugoslavia, Rumania, Bulgaria.

^d French Morocco, Algeria, Tunis.

^e As of June 10, 1943. For details of estimates not here shown by individual countries for 1941 and earlier, see WHEAT STUDIES, December 1942, XIX, 108.

TABLE II.—REPORTED WHEAT STOCKS IN NORTH AMERICA AND ARGENTINA, APRIL 1, 1937-43*

(Million bushels)

| Year | Total | U.S. grain ^a (Apr. 1) | Canadian grain (Mar. 31) | Argentine commercial (Apr. 1) | United States grain stocks | | | | Canadian grain stocks | | | | |
|---------|---------|-------------------------------------|-----------------------------|----------------------------------|----------------------------|---------------------------|------------|-------------------------|-----------------------|--|-------------------|------------------------------|---------|
| | | | | | Farm | Country mill and elevator | Commercial | City mills ^b | Farm | Country mill and elevator ^c | Terminal elevator | Other in Canada ^d | In U.S. |
| 1938... | 487.3 | 332.0 | 84.7 | 70.6 | 123.6 | 73.2 | 54.4 | 79.9 | 39.0 | 18.5 | 23.4 | 2.7 | 1.1 |
| 1939... | 881.7 | 439.9 | 202.8 | 239.0 ^e | 182.8 | 91.8 | 82.7 | 82.5 | 61.2 | 47.6 | 83.9 | 8.3 | 1.8 |
| 1940... | 979.8 | 434.4 | 419.1 | 126.3 | 149.4 | 83.8 | 105.4 | 95.0 | 106.2 | 127.9 | 153.6 | 9.1 | 22.3 |
| 1941... | 1,388.9 | 545.2 | 652.4 | 191.3 | 192.1 | 134.2 | 141.9 | 76.7 | 170.6 | 252.3 | 163.9 | 21.6 | 44.0 |
| 1942... | 1,634.8 | 810.7 | 566.4 | 257.7 | 269.1 | 181.1 | 237.8 | 122.5 | 101.4 | 206.5 | 221.7 | 21.8 | 15.0 |
| 1943... | 1,992.9 | 900.6 ^f | 798.4 | 293.9 | 327.7 | 174.6 | 212.1 | 123.5 | 363.7 | 228.7 | 186.9 | 10.9 | 8.2 |

* Official data of the U.S. Department of Agriculture, Dominion Bureau of Statistics, and National Grain and Elevator Commission.

^a Includes U.S. grain in Canada, not over one million bushels in any year shown.

^b Estimates of U.S. Department of Agriculture, based on stocks in city mills reported to the Census Bureau, raised to allow for stocks in nonreporting mills.

^c Includes private terminal elevators and flour mills in Western Division.

^d In transit, and in flour mills in Eastern Division.

^e Approximate.

^f Including 62.7 million bushels in CCC bins.

TABLE III.—UNITED STATES FLOUR PRODUCTION, EXPORTS, AND RETENTION, 1942-43, WITH COMPARISONS*

(Thousand barrels)

| Period | Production: reporting mills | | | Estimated production ^a | | | Net exports ^b | | | Estimated net retention ^c | | |
|---------------|-----------------------------|---------|---------|-----------------------------------|---------|---------|--------------------------|---------|---------|--------------------------------------|---------|---------|
| | 1940-41 | 1941-42 | 1942-43 | 1940-41 | 1941-42 | 1942-43 | 1940-41 | 1941-42 | 1942-43 | 1940-41 | 1941-42 | 1942-43 |
| July-June... | 105,331 | 104,826 | | 111,698 | 111,162 | | 7,036 | 6,125 | | 104,662 | 105,037 | |
| July-Sept.... | 26,673 | 27,005 | 27,836 | 28,286 | 28,637 | 29,519 | 1,390 | 1,625 | 1,500 | 26,896 | 27,012 | 28,019 |
| Oct.-Dec..... | 26,863 | 27,192 | 30,165 | 28,486 | 28,836 | 31,988 | 1,956 | 1,500 | 1,500 | 26,530 | 27,336 | 30,488 |
| Jan.-Mar.... | 25,645 | 26,389 | 31,386 | 27,195 | 27,984 | 33,283 | 1,460 | 1,500 | 1,500 | 25,735 | 26,484 | 31,783 |
| April-June... | 26,150 | 24,240 | | 27,731 | 25,705 | | 2,230 | 1,500 | | 25,501 | 24,205 | |

* Reported production and trade data from U.S. Department of Commerce.

^a Estimates of Holbrook Working.

^b Includes shipments to possessions. From July 1940 through September 1941, derived by subtracting imports for consumption instead of general imports minus re-exports.

Monthly data are unavailable from October 1941. The italicized figures represent our rough guesstimate of the monthly average.

TABLE IV.—WHEAT DISPOSITION ESTIMATES, ANNUALLY FROM 1938-39*
(Million bushels)

| Year | Domestic supplies | | | Domestic utilization | | | | Surplus over domestic use | | |
|------------------------------|-----------------------------|----------|-------|----------------------|----------|----------------|-------|---------------------------|--------------------------|------------------------------|
| | Initial stocks ^a | New crop | Total | Milled (net) | Seed use | Balancing item | Total | Total | Net exports ^b | Year-end stocks ^a |
| A. UNITED STATES (JULY-JUNE) | | | | | | | | | | |
| 1938-39.... | 154 | 920 | 1,074 | 475 | 76 | +163 | 714 | 360 | 109 | 251 |
| 1939-40.... | 251 | 741 | 992 | 472 | 73 | +120 | 665 | 327 | 47 | 280 |
| 1940-41.... | 280 | 813 | 1,093 | 476 | 74 | +124 | 674 | 419 | 34 | 385 |
| 1941-42.... | 385 | 943 | 1,328 | 480 | 64 | +125 | 669 | 659 | 27 ^c | 632 |
| 1942-43 ^d ... | 632 | 981 | 1,613 | 525 | 64 | +442 | 1,031 | 582 | 32 | 550 |
| B. CANADA (AUGUST-JULY) | | | | | | | | | | |
| 1938-39.... | 25 | 360 | 385 | 47 | 35 | +42 | 124 | 261 | 158 | 103 |
| 1939-40.... | 103 | 521 | 624 | 49 | 36 | +47 | 132 | 492 | 192 | 300 |
| 1940-41.... | 300 | 540 | 840 | 43 | 30 | +56 | 129 | 711 | 231 | 480 |
| 1941-42.... | 480 | 315 | 795 | 46 | 29 | +74 | 149 | 646 | 222 | 424 |
| 1942-43 ^d ... | 424 | 593 | 1,017 | 47 | 23 | +92 | 162 | 855 | 190 | 665 |
| C. AUSTRALIA (AUGUST-JULY) | | | | | | | | | | |
| 1938-39.... | 50 | 155 | 205 | 31 | 14 | +14 | 59 | 146 | 96 | 50 |
| 1939-40.... | 50 | 210 | 260 | 33 | 13 | - 2 | 44 | 216 | 86 ^c | 130 |
| 1940-41.... | 130 | 83 | 213 | 32 | 13 | + 8 | 53 | 160 | 90 ^c | 70 |
| 1941-42.... | 70 | 167 | 237 | 33 | 11 | +13 | 57 | 180 | 35 ^c | 145 |
| 1942-43 ^d ... | 145 | 157 | 302 | 33 | 11 | +13 | 57 | 245 | 35 | 210 |
| D. ARGENTINA (AUGUST-JULY) | | | | | | | | | | |
| 1938-39.... | 72 | 379 | 451 | 74 | 21 | + 4 | 99 | 352 | 122 | 230 |
| 1939-40.... | 230 | 131 | 361 | 73 | 21 | +13 | 107 | 254 | 179 | 75 |
| 1940-41.... | 75 | 299 | 374 | 73 | 22 | + 3 | 98 | 276 | 96 | 180 |
| 1941-42.... | 180 | 224 | 404 | 74 | 20 | + 7 | 101 | 303 | 83 | 220 |
| 1942-43 ^d ... | 220 | 235 | 455 | 74 | 20 | +11 | 105 | 350 | 70 | 280 |
| E. FOUR CHIEF EXPORTERS | | | | | | | | | | |
| 1938-39.... | 301 | 1,814 | 2,115 | 627 | 146 | +223 | 996 | 1,119 | 485 | 634 |
| 1939-40.... | 634 | 1,603 | 2,237 | 627 | 143 | +178 | 948 | 1,289 | 504 | 785 |
| 1940-41.... | 785 | 1,735 | 2,520 | 624 | 139 | +191 | 954 | 1,566 | 451 | 1,115 |
| 1941-42.... | 1,115 | 1,649 | 2,764 | 633 | 124 | +219 | 976 | 1,788 | 367 | 1,421 |
| 1942-43 ^d ... | 1,421 | 1,966 | 3,387 | 679 | 118 | +558 | 1,355 | 2,032 | 327 | 1,705 |

* Based on official data so far as possible, including U.S. Dept. Agr. 1943 revisions for United States stocks and crops; see WHEAT STUDIES, December 1942, XIX, 118.

^a For United States and Canada, stocks in North America, instead of stocks within the country used hitherto.

^b United States data adjusted for changes in stocks of United States wheat in Canada; Canadian include grain

clearances, as in WHEAT STUDIES, December 1941, XVIII, 185, Series B.

^c Our rough guesstimate.

^d Estimates as of June 10, 1943.

TABLE V.—SELECTED WHEAT PRICES, WEEKLY FROM JANUARY 1943*
(U.S. cents per bushel)

| Week ending | United States | | | | | | | Canada (Winnipeg) ^a | | | | Argentina, 78-kilo (fixed) ^{a,b} | Australia, f.o.b. ports ^{a,c} |
|-------------|-------------------|------|-------------------|--------------------|---------------------|------------------------|--------------------|--------------------------------|------|--------------|------------|---|--|
| | Futures (Chicago) | | Cash | | | | | Futures | | Cash | | | |
| | May | July | Basic cash (Chi.) | No. 2 H.W. (K. C.) | No. 2 R.W. (St. L.) | No. 1 Dk.N.S. (Mnpls.) | Soft White (Port.) | May | July | Wtd. average | No. 3 Man. | | |
| Jan. 2..... | 137 | 137 | 142 | 134 | ... | 136 | 122 | 85 | .. | 75 | 76 | 55 | 70 |
| 9..... | 140 | 140 | 144 | 137 | 151 | 139 | 124 | 85 | .. | 76 | 76 | 55 | 70 |
| 16..... | 139 | 139 | 144 | 136 | ... | 138 | 124 | 84 | .. | 75 | 76 | 55 | 70 |
| 23..... | 139 | 139 | 144 | 137 | 156 | 140 | 125 | 84 | .. | 74 | 76 | 55 | 70 |
| 30..... | 140 | 140 | 145 | 137 | ... | 140 | 125 | 84 | .. | 76 | 76 | 55 | 70 |
| Feb. 6..... | 140 | 140 | 145 | 136 | 156 | 141 | 125 | 84 | .. | 75 | 76 | 55 | 70 |
| 13..... | 140 | 139 | 145 | 136 | ... | 141 | 124 | 84 | .. | 76 | 76 | 55 | 70 |
| 20..... | 141 | 141 | 146 | 137 | ... | 141 | 125 | 84 | .. | 77 | 77 | 55 | 70 |
| 27..... | 144 | 145 | 148 | 138 | 162 | 143 | 125 | 83 | .. | 78 | 78 | 55 | 72 |
| Mar. 6..... | 148 | 148 | 150 | 142 | ... | 147 | 126 | 84 | .. | 78 | 78 | 55 | 72 |
| 13..... | 146 | 147 | 148 | 141 | ... | 144 | 125 | 88 | .. | 82 | 82 | 55 | 72 |
| 20..... | 145 | 146 | 147 | 139 | ... | 141 | 125 | 90 | 91 | 83 | 84 | 55 | 72 |
| 27..... | 145 | 145 | 147 | 139 | ... | 143 | 125 | 91 | 92 | 85 | 87 | 55 | 72 |
| Apr. 3..... | 145 | 145 | 147 | 139 | ... | 143 | 126 | 92 | 93 | 86 | 88 | 55 | 72 |
| 10..... | 144 | 143 | 146 | 139 | ... | 140 | 124 | 89 | 90 | 84 | 84 | 55 | 72 |
| 17..... | 143 | 142 | 145 | 137 | 152 | 139 | 125 | 89 | 90 | 84 | 84 | 55 | 72 |
| 24..... | 144 | 143 | 146 | 138 | ... | 140 | 125 | 90 | 91 | 85 | 86 | 55 | 72 |
| May 1..... | 144 | 143 | 146 | 138 | 162 | 142 | 125 | 90 | 91 | 84 | 86 | 55 | 72 |
| 8..... | 145 | 144 | 147 | 139 | ... | 143 | 126 | 91 | 91 | 84 | 86 | 55 | 72 |
| 15..... | 144 | 142 | 146 | 138 | ... | 141 | 125 | 89 | 90 | 84 | 85 | 55 | 72 |
| 22..... | 145 | 143 | 147 | 138 | 153 | 142 | 125 | 89 | 90 | 84 | 85 | 55 | .. |
| 29..... | ... | 144 | 147 | 138 | ... | 142 | 126 | 90 | 90 | 84 | 85 | 55 | .. |
| June 5..... | ... | 145 | 147 | 138 | ... | 142 | 129 | .. | 91 | 86 | 85 | 55 | .. |
| 12..... | ... | 145 | 147 | ... | ... | ... | ... | .. | 93 | .. | .. | 55 | .. |

* For sources and methods of computation, see WHEAT STUDIES, December 1941, XVIII, 189.

^a Converted at constant official exchange rate, in U.S. cents per unit of foreign currency: Canada, 90.9090; Argentina, 29.773; Australia, 322.8.

^c Australian Wheat Board offering price to United Kingdom, bulk basis; for old crop through February 20, "new/old" thereafter.

^b Grain Regulating Board buying price, basis Buenos Aires.

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Brief discussions of topics important in wartime or in planning the peace. No. 1. Helen C. Farnsworth, *Wartime Food Developments in Germany*. September 1942. 25c.

CONTRIBUTIONS

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