

# Wheat Situation

Economic Research  
Service

WS-242

U.S. Department of  
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Approved by the  
World Food and  
Agricultural Outlook  
and Situation Board



TABLE 1. --WHEAT: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1973-77

MS-242, November 1977

YEAR BEGINNING JUNE 1	SUPPLY				DISAPPEARANCE						ENDING STOCKS MAY 31		
	BEGIN- NING STOCKS	PRO- DUCTION	IMPORTS 1/	TOTAL	DOMESTIC USE				EXPORTS 1/	TOTAL DISAPPEAR- ANCE	PRIVATELY OWNED 4/	GOVT. 5/	TOTAL
					FOOD 2/	SEED	FEED 3/	TOTAL					
MILLION BUSHELS													
1973/74	597 6/	1,705	3	2,305	530	84	134	748	1,217	1,965	339	1	340
1974/75	340	1,796	3	2,139	521	93	72	686	1,018	1,704	435	---	435
1975/76	435	2,135	2	2,572	559	95	81	735	1,173	1,908	664	---	664
1976/77 7/	664	2,147	3	2,814	553	88	112	753	950	1,703	1,111	---	1,111
1977/78 8/	1,111	2,027 (+, -30)	2	3,140	558 (+, -10)	80 (+, -5)	220 (+, -30)	858 (+, -45)	1,100 (+, -100)	1,958 (+, -135)	N.A.	N.A.	1,182 (+, -165)
MILLION ACRES													
	ACREAGE				YIELD PER HARVESTED ACRE	SEASONAL PRICES RECEIVED		GOVT. PRICE SUPPORT OPERATIONS					
	ALLOTMENT	SET-ASIDE	PLANTED	HARVESTED		PARTICIPATING FARMERS	NON- PARTICIPATING FARMERS 9/	NATIONAL AVG. LOAN RATE	TARGET PRICE				
MILLION ACRES      BUSHELS      DOLLARS PER BUSHEL													
1973/74	18.7	7.4	59.0	53.9	31.7	4.16	3.95	1.25	---				
1974/75	55.0	---	71.4	65.6	27.4	4.09	4.09	1.37	2.05				
1975/76	53.5	---	75.1	69.6	30.7	3.55	3.55	1.37	2.05				
1976/77 7/	61.6	---	80.2	70.8	30.3	2.85	2.85	2.25	2.29				
1977/78	62.2	---	7/ 74.4	7/ 66.6	7/ 30.4	10/ 2.15-2.35		2.25	11/ 2.90/2.47				

1/ IMPORTS AND EXPORTS INCLUDE FLOUR AND OTHER PRODUCTS EXPRESSED IN WHEAT EQUIVALENTS. 2/ USED FOR FOOD IN THE UNITED STATES, U.S. TERRITORIES, AND BY THE MILITARY. 3/ RESIDUAL; APPROXIMATES FEED USE AND INCLUDES NEGLIGIBLE QUANTITIES USED FOR DISTILLED SPIRITS AND BEER. 4/ INCLUDES TOTAL LOANS. 5/ UNCOMMITTED, GOVERNMENT ONLY. 6/ EXCLUDES AN ABNORMALLY LARGE VOLUME OF GRAIN IN TRANSIT. 7/ PRELIMINARY. 8/ REFLECTS THE SRS ESTIMATE OF 'ROOT MEAN SQUARE ERROR' FOR PRODUCTION AND COMPARABLE ESTIMATES OF VARIABILITY FOR OTHER ITEMS. CHANCES ARE ABOUT 2 OUT OF 3 THE FINAL OUTCOME WOULD FALL WITHIN THE RANGES. 9/ SEASON AVERAGE PRICE RECEIVED BY FARMERS AS REPORTED BY THE STATISTICAL REPORTING SERVICE. 10/ PROJECTED. 11/ UNPLANTED PORTION OF ALLOTMENT QUALIFIES FOR LOWER AMOUNT. NA = NOT AVAILABLE.

# THE WHEAT SITUATION

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### Heavy Loan Activity, Improved Export Prospects Boost Wheat Price Outlook

Although down 6 percent from last year's record, the 1977 wheat crop was the third consecutive 2-billion bushel crop. The June 1 carryover was the largest since 1963 and brought the 1977/78 supply to a record high.

World wheat prospects have deteriorated markedly since the start of the season, particularly in the USSR where the crop is now expected to be well below last year's 97 million tons. Thus, what at first appeared to be a crop near last year's record will fall short by around 8 percent. As a result, world wheat trade is expected to be record large, and there will likely be a substantial world stock reduction in 1977/78, although carryover stocks would remain large.

Exports from the United States are expected to be about 150 million bushels above last season's 950 million. Feed use will be up about 100 million, not as much as earlier estimates when it looked as if wheat would continue to be priced well below other grains. Total utilization is projected at 1,958 million bushels up about 15 percent but still less than the 1977 crop, so stocks are likely to build modestly in 1977/78.

The large harvest and limited storage space resulted in wider than normal spreads between farm prices and major market prices early in the season when new crop farm prices were around 15 percent under the U.S. loan rate of \$2.25 per bushel. Loan activity has been heavy this season, with a fifth of the 1977 crop already placed under loan by mid-October. Coupled with 1976 wheat still under loan, in reserve, or in Commodity Credit Corporation (CCC) inventory, brought the total to 800 million bushels or a third of October 1 stocks.

Following the sale or storage of harvest supplies, prices have strengthened 40 to 50 cents per bushel. Loan inventories and producer holdings have been major supporting factors. Some further price strength is possible depending primarily on crop developments abroad, foreign purchases and prospects for participation in the 1978 farm programs. Even though, farm prices are expected to only average between \$2.15 and \$2.35 per bushel

The *Wheat Situation* is published in February, May, August and November.

for the entire season, down from the \$2.85 average in 1976/77.

Deficiency payments for 1977 wheat will be paid to farmers based on two target rates. Payments based on \$2.90 per bushel will be made on 1977 plantings or the allotment, whichever is smaller. Any unplanted portion of allotment qualifies for payment based on a target price of \$2.47 per bushel. In each case, the payment this year is the difference between the target price and the \$2.25 loan level.

For the 1978 crop, a 20-percent set aside has been indicated along with a loan rate of \$2.25 and either a \$3.00 or \$3.05 target price depending on the total crop size. The new Farm Act will change program operations markedly. It uses the current year's plantings for harvest as the basis for set aside and payments rather than any historical allotment. It appears that program features offer wheat growers strong incentive to participate, and plantings for harvest in 1978 likely will be reduced substantially.

## THE 1977/78 SITUATION

### Another 2 Billion Bushel Crop Means A Record 1977/78 Supply

The 1977 U.S. wheat crop paced its development through drought and floods. The hardiness of the wheat plant was again evidenced, for on October 1, this year's crop was estimated at 2,027 million bushels, only 6 percent below last year's record. Chances are 2 out of 3 that this forecast will not differ from the final production by more than 30 million bushels. Planted acreage totaled 74.4 million acres, 7 percent less than 1976's. Harvest acreage was down 6 percent, and yields per acre were about the same.

Planting of the 1977 *winter wheat* crop took place under widespread dry conditions, topped off by a bitter cold winter with little snow cover. Drought conditions prevailed all season in many Western States; however, widespread abundant spring rains in the Plains changed a bleak crop outlook quickly. Winter wheat production totaled 1,529 million bushels, only a 2 percent decline from last year. Average winter wheat yields were almost equal to 1976 with marked regional variations. White winter wheat yields in the Northwest dropped sharply, major Hard Red Winter States averaged slightly higher yields, and Eastern Soft Red yields showed sizable increases.

Declining prices caused *Durum* growers in the traditional Northern Plains to reduce acreage by one-third. Low soil moisture concern in early spring turned to concern about too much moisture during harvest. Although a small portion of North Dakota's crop (the leading producer) was rain-damaged in the field, the quality of most of this year's crop is good. Western States shifted to other crops on their irrigated acreage. A decrease in yields and harvested acres produced a *Durum* crop of 82 million bushels, about 40 percent below last year's record production.

Growers of *other spring wheat* reduced planted acres by 12 percent with most of this acreage going

into barley, oats, and oil crops. Dry weather plagued early developments and wet weather late in the harvest caused some sprout damage in North Dakota and Minnesota. This year's smaller acreage more than offset slightly higher yields and reduced the 1977 spring crop 7 percent below a year ago. Total spring wheat production consisted of 396 million bushels of Hard Red Spring and 20 million bushels of White Wheat.

Wheat: U.S. planted and harvested acreage

Class	Planted		Harvested		Percent harvested	
	1976	1977 <sup>1</sup>	1976	1977 <sup>1</sup>	1976	1977 <sup>1</sup>
	<i>Million acres</i>				<i>Percent</i>	
Winter . . . . .	57.7	55.7	49.5	48.5	85.8	87.2
Durum . . . . .	4.7	3.2	4.6	3.1	96.5	97.0
Other						
Spring . . . . .	17.8	15.5	16.7	15.0	94.1	96.5
Total . . . . .	80.2	74.4	70.8	66.6	88.3	89.5

<sup>1</sup> Preliminary.

Overall quality of the 1977 crop was generally good to excellent with protein levels running above the past year's average. Abundant supplies of higher protein hard wheat cut the protein premium in half. For soft wheats, protein levels were unusually high, an undesirable feature for baking, and resulted in price premiums for lower proteins.

With the largest June carryover since 1963, total wheat supplies for the 1977/78 crop year are over 3 billion bushels, an all-time record. Usage during the June-September period was 742 million bushels, up 18 percent from last year due to increased wheat feeding, but wheat stocks on October 1 were a record high at 2,396 million bushels.



## Food Use Slows

Apparent wheat food use (mill grind) for the June-September period was slightly below the same period a year earlier. However, millers and bakers with expectations of low stable prices, may have kept flour inventories low. If this is so, actual food consumption of wheat products is probably holding its own. Mill grind may soon show a rebound if recent price rises cause millers and bakers to build inventories in anticipation of further rises. Durum grind and use is up from last year. Although Durum and semolina prices have shown sharp increases recently, they are still relatively attractive to pasta makers who are inclined to stay with Durum for some time before they turn to hard wheat flour.

## Wheat Exports Slow; Prospects Improve

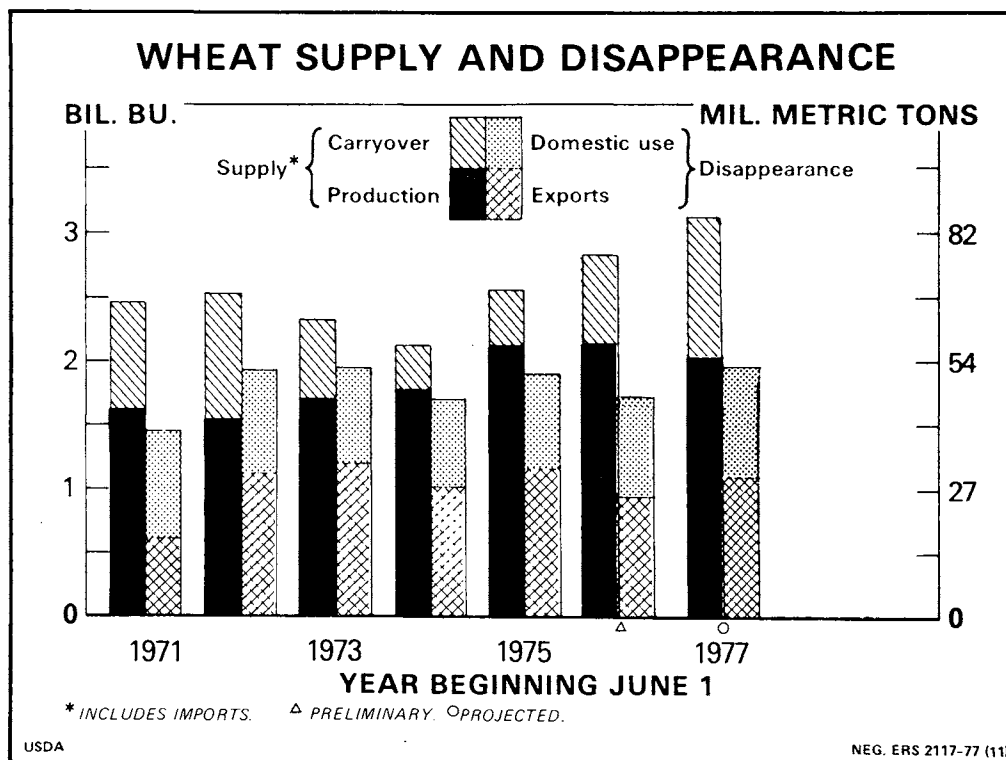
Wheat shipments during the June-September period totaled 382 million bushels, about 5 percent behind last year's pace. Export commitments as of October 23 totaled 635 million bushels, 9 percent below that time in 1976. India, with successive large grain harvests, and a heavy U.S. wheat purchaser for the last 2 years, was noticeably absent. Poland and Mexico had sizable purchase increases due to short and poor quality crops.

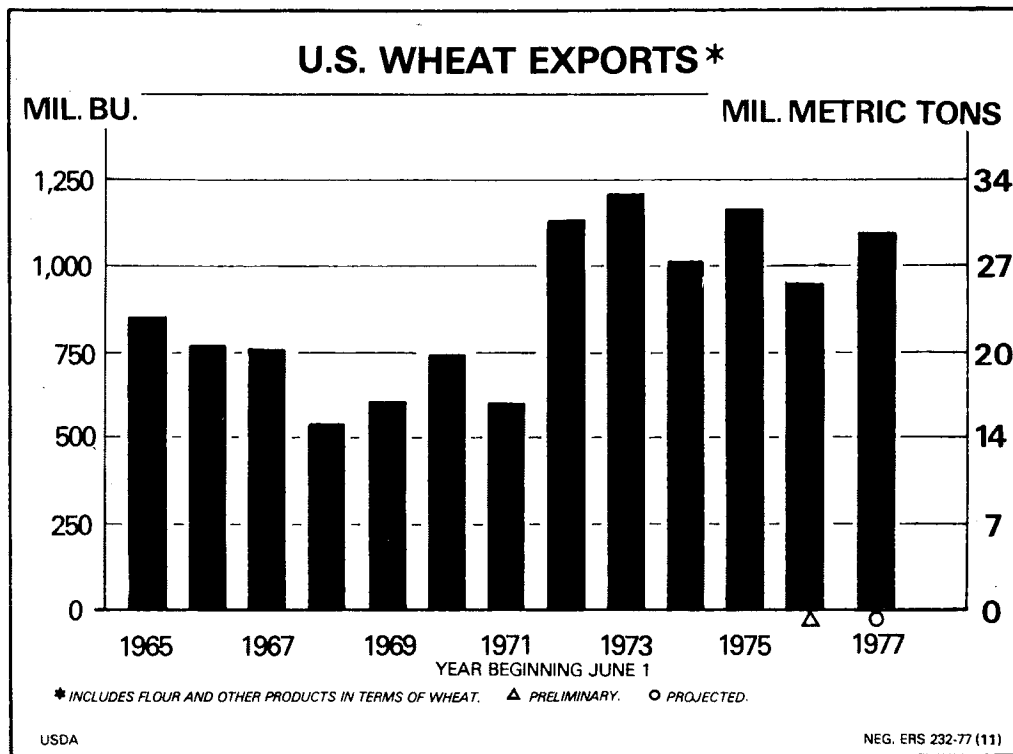
Though the export business thus far is running slower than last season, it is expected to end up well above last season's 950 million bushels. Weather developments have reduced 1977 world wheat crop prospects, particularly in the USSR and the Southern Hemisphere; lowered crop quality in major producing areas; and increased import demand to a record level. Other exporting nations have already booked much of their expected 1977/78 foreign sales which intun means that the United States would likely supply any large additional world import demand.

During the semi-annual consultation, as provided by the U.S.-USSR Long Term Grain Supply Agreement, on October 6, the United States advised the USSR that it could purchase up to 15 million metric tons of wheat and corn during the October/September season without further consultation. But, it is uncertain how much in addition to the 6 million metric ton minimum (roughly half wheat and half corn) will be wheat purchases.

Flour and wheat product export purchases have been rather limited compared to 1976's phenomenal rate when large P.L. 480 shipments were made.

Total 1977/78 utilization is projected at over 1.9 billion bushels, up 15 percent, but, still less than the 1977 crop. Thus, stocks are likely to be modestly higher at the end of the 1977/78 season.





#### Wheat Prices Recover From 5-Year Low

Abundant carryover stocks of 1976 wheat and the bountiful 1977 harvest pushed early season wheat prices to the lowest level since February 1973. Farm storage in the Southern Plains quickly filled and some farmers, reluctant to incur off-farm storage costs, sold at low prices, well below \$2.00 per bushel.

As the harvest glut passed, growers marketing and inventory strategy became apparent with their heavy use of the CCC loan program. Rain slowed the final stages of harvest in the Northern Plains, causing some concern over the quality and quantity of that harvest. At the same time, prospects for the world wheat crop slipped and world trade increased, while commercial demand in U.S. markets began to increase. All of these factors contributed to a rise of 40 to 50 cents a bushel in market prices by early November. The U.S. farm price averaged \$2.26 per bushel in mid-October compared to the June low of \$2.03 per bushel.

Further price strength is possible, depending primarily on crop developments abroad, foreign purchases, and prospects for participation in the 1978 farm programs. Farm prices are expected to average between \$2.15 and \$2.35 per bushel for the

entire season down from the \$2.85 average in 1976/77.

While other wheat class prices still remained below last year, Durum prices are above year earlier levels. (See section on wheat classes for more discussion).

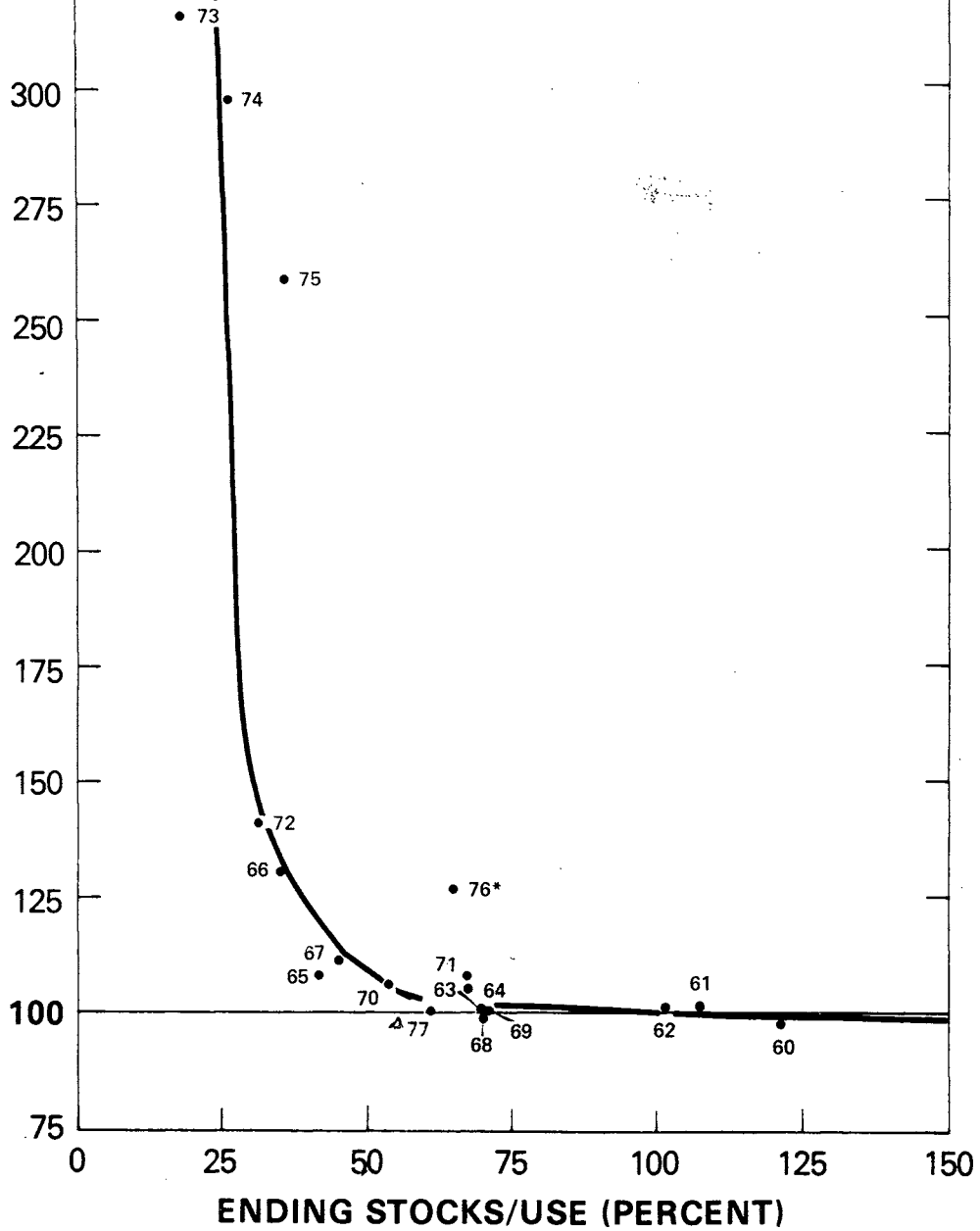
Under the new Farm Act, deficiency payments for the 1977 wheat crop will be paid to farmers based on the difference between two target prices and the \$2.25 loan level. Wheat planted within the established allotment acres will be paid 65 cents per bushel (\$2.90 less \$2.25) and any unplanted portion of an allotment will receive 22 cents per bushel (\$2.47 less \$2.25). An estimated \$1.2 billion will be paid to producers beginning December 1.

#### Bread Prices and Farm Value Up

The average price of a 1-pound loaf of white pan bread was 35.7 cents in September, up slightly from August and four-tenths of a cent higher than in the first quarter of 1977. In June, the farm value of wheat dropped to 2.2 cents per loaf, the lowest since the late fifties. After declining for many months, the farm value of wheat in a loaf of bread has risen since June to 2.6 cents in September, but

# WHEAT PRICE/LOAN RELATED TO ENDING STOCKS/USE

SEASON AVE.  
PRICE/LOAN  
(PERCENT)



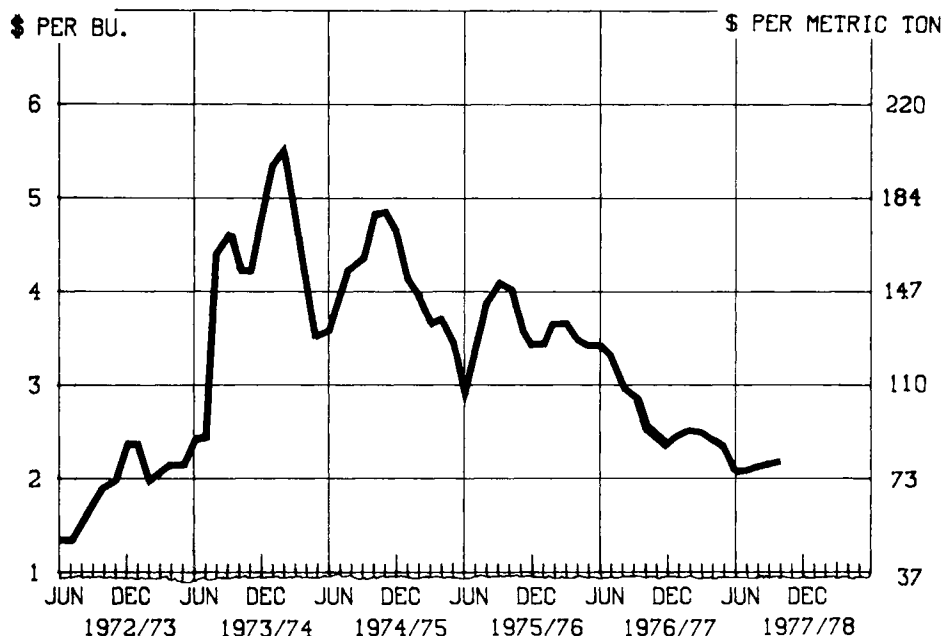
\* PRELIMINARY.      Δ PROJECTED.

USDA

NEG. ERS 2761-77(11)



## WHEAT PRICES RECEIVED BY FARMERS



USDA

NEG. ERS 891-77(11)

the farm-retail spread was unchanged in September (table 9). The baking-wholesaling spread declined 0.1 cent following 6 months of rising or steady baking wholesaling spreads. The flour milling spread declined from July to August and the spread for other farm ingredients rose slightly.

The recent rise in wheat prices could lead to some increase in bread prices or result in a narrowing of the farm retail spread. In any event, the impact will be less than a half cent a loaf. Thus, bread prices should exhibit only a slight change over the next several months.

### WHEAT OUTLOOK BY CLASS

#### Record HRW Supplies; Loan Activity Very Heavy

The 1977 Hard Red Winter (HRW) wheat crop of 997 million bushels, the second largest on record, was only 5 percent below 1975's all-time record. Harvested area was up over a million acres and yields were virtually unchanged from 1976.

The quality of the 1977 HRW crop is the best in years. Test weights are a trifle lower than last year but protein is running  $\frac{1}{2}$  to 1 percentage point higher. There was enough variation in quality throughout the production areas that buyers will have few problems obtaining desired quality features.

Total HRW supplies for the 1977/78 marketing year are a record 1.6 million about 20 percent more than a year ago. Outstanding loans of HRW totaled 472 million bushels by the end of September, about 40 percent of October 1 stocks. Loans on the 1977 crop have already exceeded the entire amount of 1976 HRW placed under loan. This sizable volume is a significant pricing factor from the standpoint of available supplies for users.

Increased domestic use of HRW mostly reflects a surge in feed use during the period of low harvesttime prices. At that time, feeders were buying wheat at extremely attractive prices. But, with the

advance of wheat prices since mid-August, HRW lost much of this price advantage for feed. Feeding may have been around 100-125 million bushels in June-September, normally the largest HRW feeding period.

While all wheat exports during June-September were down about 5 percent from a year ago, HRW exports moved 6 percent ahead of the 1976 pace, possibly as a result of early season prices being a good buy for higher quality wheat. However, outstanding commitments as of October 23 were trailing last year by 5 percent.

Thus, HRW exports need some impetus in order to attain a projected 35-percent increase for 1977/78. Larger U.S. import purchase authority for the USSR, crop setbacks in other producing areas, and rain damage to the 1977 Canadian crop may provide some additional foreign demand.

Following the harvest drop in prices to below loan levels, HRW (Kansas City ordinary), strengthened by heavy loan activity and strong commercial demand, have recovered about 50 cents per bushel. Protein premiums have also widened since July but still are half of last year's differential.

Seeding of the 1978 crop has made good progress under highly favorable seedbed and subsoil moisture conditions, except in Texas where conditions have been dry. Some of the seeded area will likely be designated as set aside next spring.

Wheat premium for protein over ordinary

Protein	No. 1 HRW Kansas City		No. 1 Dark Northern Spring, Minneapolis	
	Oct. 21, 1976	Oct. 20, 1977	Oct. 21, 1976	Oct. 20, 1977
	<i>Cents per bushel</i>			
Ordinary . . . .	0	0	0	0
12 percent ..	11	2	—	—
13 percent ..	33	4	30	15
14 percent ..	44	5	48	27
15 percent ..	—	—	64	41
17 percent ..	—	—	90	59

### Hard Red Spring Supplies Larger; Exports Up

The 1977 Hard Red Spring (HRS) crop was off moderately from last year's record 410 million bushels. Acreage was down in all of the Northern Plains States except South Dakota. But favorable growing weather produced higher yields in Minnesota and South Dakota while dry conditions in Montana and losses from recurring rains at harvest in North Dakota reduced yields per acre.

The spring wheat crop came through with good overall milling and baking qualities. Test weights are slightly lower with protein a trifle higher than last year. Wet conditions in September caused

some sprout damage in North Dakota and Minnesota.

HRS carryover—plus the second bumper crop in succession—brought 1977/78 supplies to near 650 million bushels, about 120 million above last year. On September 30, 164 million bushels were under price support programs.

Domestic use may differ little from the 1976/77 level as lower priced HRW wheats, with above average protein, can be substituted or blended when spring wheat protein premiums rise.

However, 1977/78 HRS exports are projected at 150 million bushels, about 20 percent above 1976/77. Total HRS export commitments as of October 23 were 103 million bushels, a 19-percent increase from a year ago. Sales to West Germany, Italy, Japan, Philippines, and Nigeria have increased over their respective 1976 purchases. Prospects for hard spring exports have improved with recent deterioration of world crops and lower quality, particularly in Europe and Canada.

This year's exports and domestic disappearance are not expected to be sufficient to prevent another sizable buildup in stocks.

Prices of No. 1 DNS ordinary at Minneapolis have moved upward with the recent wheat market strength. Premiums for higher proteins have shown added improvement in late October, reflecting concern over the final effects the wet harvest weather had upon supplies of quality hard spring wheat in the U.S. and Canada.

### Durum Crop and Supplies Down; Prices Advance

The 1977 durum crop, at about 80 million bushels, is about 40 percent below last year's record crop and is the first cutback since 1972. A sharp cut in plantings and slightly lower average yields contributed to the decrease. Production in North Dakota, the leading Durum producing State, was down a third from last year. In addition, a sizable reduction came from the Southwest "desert" Durum, where the 1977 crop was 9 million bushels compared with 39 million in 1976.

Good overall quality is reported for most of the 1977 Durum crop, although some of the late harvest suffered significant sprout damage.

Even with a sizable 1977/78 carryin, total supplies for 1977/78, at 169 million bushels, are down 11 percent from last year. Total disappearance will be down slightly but only because there was extra heavy Durum feeding in 1976/77. But with a smaller supply, carryover at the end of the season is expected to be down substantially.

June-September mill grind is keeping up the brisk pace that made last year's 36 million bushels a record grind. Recently advancing price spreads between semolina and competing flours may result

in more farina usage by pasta manufacturers. However, continued strong pasta consumption is still expected to push semolina production up from 1976/77.

Durum exports for the June-September period were about a third off last year's pace, and as of October 23, total commitments for the 1977/78 marketing year are down 6 percent. However, developments in world Durum trade point toward a probable increase of U.S. Durum exports over a year ago. Short Durum crops in Italy and North Africa have increased import requirements and Canada's 1977 Durum crop forecast was half of 1976's and carryin stocks are down. Normally, Canada and the United States are the major Durum exporters but Turkey, one of the world's largest Durum producer, has included at least 4 million bushels of Durum in its aggressive export sales program. Total U.S. Durum exports for 1977/78 are estimated at 50 million bushels, about 20 percent more than in 1976/77.

Minneapolis flour and cash prices

Year beginning June	Flour		Cash	
	Standard Spring Patent	Semolina 100% Durum	No. 1 Dark Northern Spring	Hard Amber Durum, Med.
	Dollars per cwt.		Dollars per bushel	
1974/75 . . . . .	11.24	18.13	4.57	<sup>1</sup> 6.53
1975/76 . . . . .	10.22	13.25	3.74	5.16
1976/77 . . . . .	8.05	8.18	2.96	3.30
1977				
June 15 . . . . .	6.70	7.55	2.40	2.72
July 15 . . . . .	6.75	7.50	2.28	2.80
Aug. 15 . . . . .	7.05	7.75	2.14	2.78
Sept. 15 . . . . .	6.95	8.25	2.44	3.05
Oct. 14 . . . . .	7.30	9.30	2.59	3.43

<sup>1</sup>Ordinary protein.

Prices for Durum and semolina flour have advanced sharply since early September. By late October, No. 1 Hard Amber Durum, Minneapolis, climbed to near \$3.50 per bushel compared with \$3.25 in 1976. Likewise, semolina prices increased \$1.30 per cwt. to \$9.30 compared with \$7.80 a year ago. The prospects of smaller supplies of better quality Durum, expanding export prospects and continued good demand from mills can lend price strength for much of the year. Prudent marketing by Durum producers is also an important factor. As of September 30, about 30 million bushels or about 20 percent of total stocks had been placed under loan.

#### SRW Supplies Up, Demand Steady

Another bumper Soft Red Winter (SRW) wheat crop of over 340 million bushels resulted in a record supply and below loan level prices last sum-

mer. Improved 1977 yields nearly offset a 10-percent decrease in planted acreage. Total 1977/78 supplies are over 400 million bushels, 3 percent higher than last year. This year's SRW crop has generally good baking characteristics with somewhat lower test weights and higher than usual protein levels.

Domestic use is expected to be up in 1977/78 largely on the strength of more feeding. SRW harvest prices were very favorably priced with feed grains last summer. But advancing SRW prices and reduced feed grain prices reversed this situation except in some feed deficit areas of the South.

SRW exports have gradually accelerated as SRW has been priced well under other competing classes. SRW exports in 1977/78 are projected at 180 million bushels, equal to last year. However, shipments during June-September totaled 84 million bushels, more than a tenth below last year's fast pace. As of October 23, both India and Iran, sizable U.S. buyers last year, were noticeably absent as purchasers. India is not likely to enter the U.S. market due to its sizable wheat supplies and so far Iran has filled its soft wheat needs with white wheat.

Total disappearance in 1977/78 is likely to be about equal to the 1978 crop, resulting in little change in carryout. The general strength of wheat prices carried SRW from an after-harvest low of around \$2.00 to \$2.35 per bushel (Chicago) in October. SRW Chicago is 30 cents below Kansas City HRW, compared with the 4 cent spread last year. Widespread higher protein in the 1977 crop created premiums for lower protein supplies early in the season. Seeding of the 1978 SRW crop in major producing States of the Midwest has been hampered by rains that are providing excellent seedbed conditions.

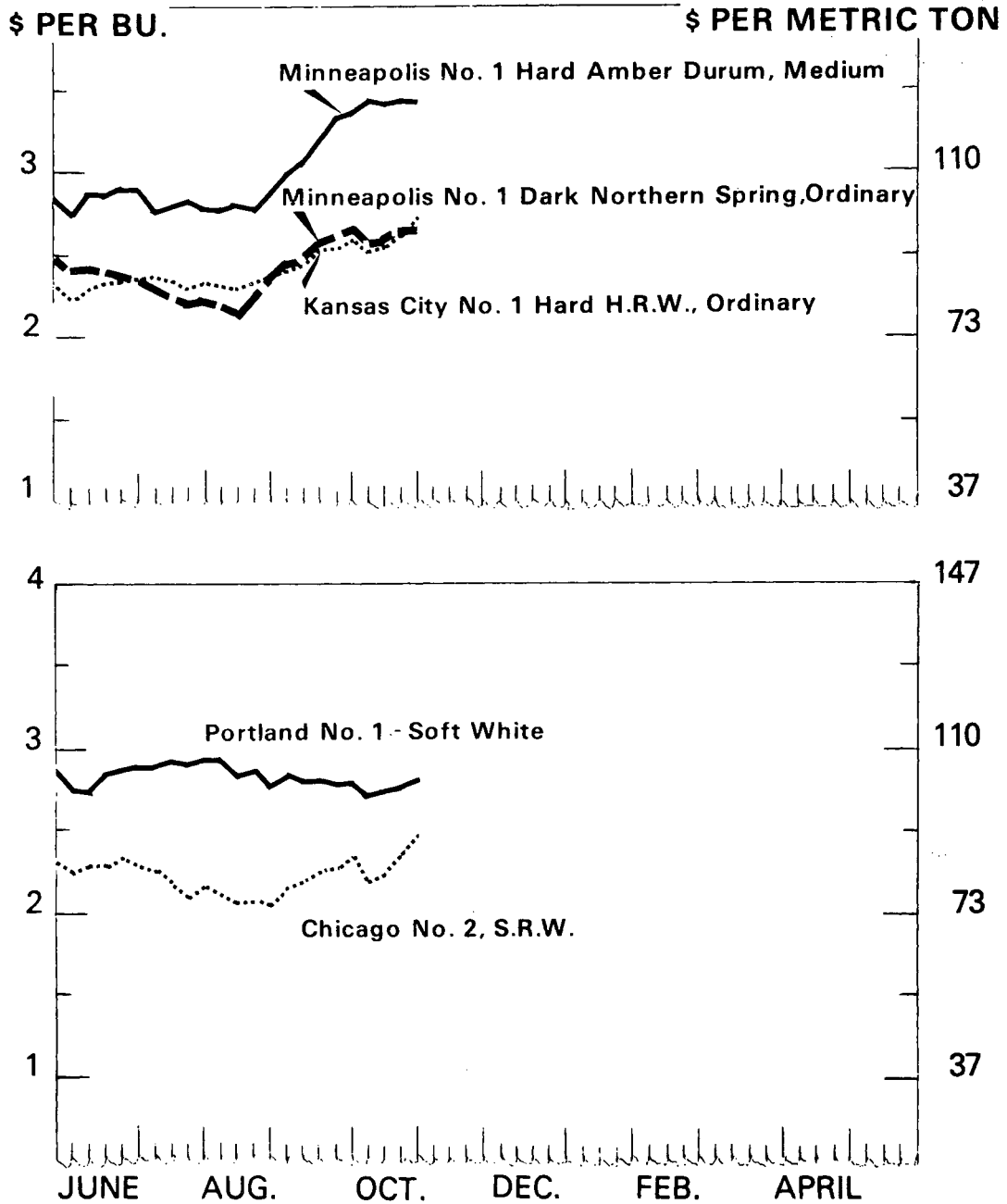
#### White Wheat Crop Down—Exports Slack

Prolonged dry conditions plagued the Pacific Northwest (PNW) 1977 white wheat crop throughout the growing season. The result was a white wheat crop that was down over a fourth from 1976. Of the 211 million bushel crop, the PNW accounted for around 141 million bushels, the East for about 35 million, and other western States for 35 million. Even with a near-record high carryin, 1977/78 supplies are still about a tenth below a year ago. Nearly 30 percent of the estimated October 1 stocks were in the loan program.

This year's western white crop has lower test weights and grades averaging below normal due to the prolonged drought. The protein content (10.5) was higher than desired for mill use.

While domestic white wheat demand continues steady, there is uncertainty about the 1977 export demand maintaining the brisk pace of the last two

# CASH WHEAT PRICES, 1977/78\*



\* THURSDAY PRICE.

USDA

NEG. ERS 257-77(11)

years. During June-September, exports were 52 million bushels, 15 percent behind a year ago. India, a large past customer, is completely out of the U.S. white wheat market so far this year, while small increases in purchases by Iran and Japan offset part of the loss. Total commitments as of October 23 were down about a third from last year's pace. Reflecting this weakness, exports for 1977/78 are projected at 155 million bushels, 17 percent below 1976/77.

Continued relative price strength in the western white market, a reflection of tight producer hold-

ing, has apparently caused a few foreign buyers to go east for lower priced soft white wheat. While October prices for No. 1 soft white, Portland, were holding around \$2.80 per bushel, No. 2 soft white, Toledo, was under \$2.20 (table 6). June-September eastern white exports totaled nearly 2 million bushels compared with slightly over half a million in the same period a year ago.

Marginal subsoil moisture conditions exist in many Pacific Northwest areas as an aftermath of the prolonged drought but, recent rains have encouraged planting of the 1978 wheat crop.

## WORLD WHEAT SITUATION AND OUTLOOK FOR 1977/78<sup>1</sup>

### World Wheat Harvest Down; Trade Likely a Record

The estimate of the 1977 world wheat harvest has been lowered as the season progressed and now is estimated at about 8 percent below last year's record of 412 million metric tons. There has been a significant reversal in world crop prospects since July, particularly in the Soviet Union and the Southern Hemisphere. Global 1977/78 wheat trade is expected to be a record and with consumption for 1977/78 estimated at a record level, end-of-year stocks, contrary to earlier expectations, will probably decline.

World highlights so far include: (1) the emergence of Turkey and India as exporters, (2) a reduced wheat harvest of lower quality in the Soviet Union, (3) lower milling quality of Europe's and Canada's crops, caused by wet weather, (4) heavy export bookings by Canada, Australia, and Argentina for 1977/78 delivery, (5) reduced harvest and unusually large purchases by the PRC, (6) reduced plantings and crop prospects in Canada, Argentina, and Australia, and (7) sharply reduced harvests and increased import requirements in most countries ringing the Mediterranean.

### USSR 1977 Wheat Harvest Down

The USSR's 1977 wheat crop has been reduced substantially from earlier expectations and is now estimated well below last year's 97 million tons. The total grain harvest (including miscellaneous

grains) is estimated at 194 million tons, 13 percent below last year's record. The waste component of the total grain crop is estimated to be at least 10 million tons larger than normal so the quantity in terms of useable grain will fall well below last year's level.

USSR: Wheat production

Year	Winter	Spring	Total
<i>1,000 metric tons</i>			
1966-70 average . . .	35,888	54,304	90,192
1971 . . . . .	47,618	51,142	98,760
1972 . . . . .	29,380	56,613	85,993
1973 . . . . .	49,435	60,349	109,784
1974 . . . . .	44,698	39,215	83,913
1975 . . . . .	36,633	29,511	66,144
1976 . . . . .	44,582	52,270	96,852
1977 projected . . .	---	---	90,000

### PRC's Wheat Harvest Down; Imports Up Substantially

It appears that the PRC's winter wheat suffered a magnitude of drought damage that an improved spring crop could not offset. Thus, the indicated 1977 wheat harvest is below the 1976 crop. This has prompted a step up in wheat imports for 1977/78 which are estimated at 9.5 million tons, almost 3 times the level of last year.

### Europe's 1977 Wheat Harvest Down; Quality Lower

West Europe's 1977 wheat harvest is estimated at 50 million tons, near last year's outturn, but milling quality is lower due to wet weather at har-

<sup>1</sup>Based on FAS, *World Grain Situation: 1977/78 Crop and Trade Developments*, FS 21-77, October 20, 1977. (Updated to include recent developments in the Soviet Union and the United States.)

vest. *East Europe's* 1977 wheat harvest is estimated at 34 million tons, down 2 percent from last year.

#### **Canada's 1977 Wheat Harvest and Quality Down**

Canada's 1977 wheat harvest is estimated at 18.4 million tons—a million tons more than estimated in mid-September but still down 22 percent from last year's record as both plantings and yields are off. Wet conditions at harvest have reduced crop quality. Canadian farmers cut their planted area 10 percent because of low prices.

#### **Southern Hemisphere's Crop Reduced**

*Argentina's* 1977 wheat crop to be harvested in November is estimated at 6.7 million tons, down about 40 percent from last year because of sharply reduced plantings and drought.

*Australia's* 1977 wheat harvest is projected at 10 million tons, 15 percent less than last year and 3 million tons less than the mid-September forecast. This reflects the lack of spring rains in major wheat producing regions and continued below normal rainfall for July-October throughout southern Australia.

#### **Turkey's Record Crops Generate Exports**

Turkey has emerged as a significant wheat exporter following a record harvest in 1976 and 1977 which nearly doubled the annual output of 10 years ago. The 1977 harvest is estimated at 13.5 million tons, up 4 percent over last year. These harvests have built-up an estimated 2-million-ton export supply for the 1977/78 season (July-June). In an effort to reduce wheat stocks as well as to earn foreign exchange, Turkey has sold wheat aggressively. Turkey exported 400,000 tons of

wheat last year and shipments of around 1.5 million tons are expected in 1977/78, including at least 100,000 tons of Durum.

#### **1977/78 Wheat Trade Outlook**

World 1977/78 (July-June) wheat exports are projected to reach a record of around 70 million tons compared to last season's 61 million. Other trade developments include increased food grain needs in Vietnam, Laos, and Cambodia; stronger demand in Europe for milling quality wheat; increased import requirements for North Africa and the Middle East; and reduced export availabilities in Argentina. Thus, shipments for Canada, Australia, and the United States are projected higher.

#### **World Wheat Stocks Expected to Decline in 1977/78**

World stocks<sup>2</sup> at the end of 1977/78 are projected down about a tenth from the 96 million tons a year earlier. The United States accounts for nearly 40 percent of the total. Of the major wheat exporters only the United States is expected to hold larger stocks. The noticeable shift in the balance of global supply/demand forces for wheat that began to emerge last summer, when carryover was expected to increase, is reflected in the estimated drawdown of wheat stocks. Among the major wheat exporters, stocks in Canada, Australia, and Argentina are expected to fall 18 percent, while U.S. stocks may rise 6 percent.

<sup>2</sup>Stock data are based on an aggregate of differing local marketing years and should not be construed as representing world stock levels at a fixed point in time. Stock data are not available for all countries.

## **OUTLOOK FOR 1978 PLANTINGS**

#### **1978 Wheat Program A Major Influence**

The recently enacted Food and Agriculture Act of 1977 has provisions for set aside and deficiency payments which are similar to previous programs. But there are major changes in how these programs will operate that will affect planting and harvesting decisions. USDA has indicated a 20 percent wheat set aside, and a decision on 1978 feed grain set aside will be announced no later than November 15. Here are major proposals:

- If wheat is planted all set-aside requirements must be met to be eligible for USDA

loans, purchase agreements, and payments (including disaster program payments) on any eligible commodities. In other words, if there is a set-aside for feed grains and wheat and both are produced, a grower can't be in one program and not the other and receive program benefits. Also, if growers don't participate in the wheat set-aside but plants wheat, they lose program benefits for crops which have no set-aside requirements.

- The 1978 wheat loan rate will remain at \$2.25 per bushel unless the average U.S.

farm price for 1977/78 exceeds \$2.36 per bushel. In this event, the rate would rise to \$2.35.

- The wheat target price rises to \$3.00 if the 1978 crop equals or exceeds 1.8 billion bushels, or \$3.05 if it is below 1.8 billion bushels.
- Wheat acreage to be set aside must equal 20 percent of the actual planted acreage to be harvested for grain. Fallow land cannot be counted as set-aside acres.
- Set-aside acreage must have an approved cover crop such as forages or small grains that are not allowed to mature. Although set-aside acreage need not be designated until spring. Winter wheat grazed after December 31 is not expected to qualify as set-aside.
- Target price payments will be made on a percentage of 1978 plantings for harvest and the farm program yield. The percentage or allocation factor will be determined by dividing the national program acreage by the number of acres harvested for grain.
- The national program acreage has been proposed at 57.8 million acres.
- If 1978 wheat acreage planted for grain harvest is reduced 20 percent from 1977 and meets all set-aside requirements, the entire acreage will be eligible for target price payments.
- The total of "normal crop acreage" (NCA) must be reduced by the amount of the set-aside. Basically, NCA is the land that was in designated crops in 1977, adjusted for

abnormal situations. Crops propose NCA include wheat, barley, oats, rye, corn, sorghum, rice, soybeans, flax, sunflowers, sugarbeets, sugarcane, upland cotton, and dry edible beans. Fallow land probably will not be counted as planted acreage.

- Limitation on all payments a person may receive for wheat, feed grains, and cotton programs in 1978 is \$40,000. Payments for disaster, certain resource adjustments, and public access for recreation do not count against the limit.

### Factors Affecting Plantings

Unless there is a major crop failure somewhere in the world next year it looks as if wheat prices in 1978/79 will continue to run near loan levels. With the pessimistic price outlook, target price payments become an important income factor in deciding whether to participate in the program. Also, eligibility for the loan, reserve, and disaster programs will bear on 1978 set-aside decisions.

Alternative crops, including hay and forage, will be important in influencing cropping decisions. A feed grain set-aside remains possible.

The 1978 wheat program offers strong economic incentives, so it appears that participation should be heavy and plantings may be down substantially from the 74.4 million acres in 1977. Still, with moisture conditions through the entire Wheat Belt much improved from a year ago, yield prospects appear brighter, so the reduction in production will likely be even less than the cut in acreage.

## RYE HIGHLIGHTS

Rye: Supply and disappearance

Item	June-September	
	1976	1977
	<i>Million bushels</i>	
June 1 stocks .....	4.5	4.5
Production .....	16.7	18.2
Imports .....	.2	.1
Total supply <sup>1</sup> .....	21.4	22.9
Exports .....	( <sup>2</sup> )	( <sup>2</sup> )
Food .....	1.2	1.2
Seed .....	2.3	2.3
Industrial .....	.5	.6
Feed .....	2.4	4.1
Total disappearance .....	6.4	8.2
October 1 stocks .....	15.0	14.7

<sup>1</sup> Totals may not add due to independent rounding. <sup>2</sup> Less than 50,000 bushels.

### Rye Supplies Up, Improved Use

The 1977 rye crop is expected to total 18.2 million bushels, 9 percent above the drought stricken

Wheat and rye cash prices, June-May 1971-77

Year and month	No. 2 wheat SRW Chicago	No. 2 rye Minn.	Wheat/rye ratio
1971/72 .....	1.59	1.01	157
1972/73 .....	2.20	1.08	204
1973/74 .....	4.84	2.51	193
1974/75 .....	4.16	2.89	144
1975/76 .....	3.54	2.84	125
1976/77 .....	2.81	2.87	98
1977/78			
June .....	2.29	2.53	91
July .....	2.20	1.94	113
August .....	2.08	1.79	116
September .....	2.20	2.06	107
October .....	2.27	2.28	99

1976 crop. Acreage harvested for grain is 2 percent below 1976 and a new record low. However, beneficial moisture in the upper Midwest pushed yields up 2.5 bushels above last year to an average 23.2 bushels per acre.

The larger crop will nudge up the 1977/78 rye supply to about 7 percent above a year ago, the first increase in six years. The recent downtrend in food use was apparently halted as rye prices dropped below wheat in July. An upturn in feed use is expected in 1977/78 due to lower prices. Exports were next to zero in 1976/77 and are

expected to show little improvement during 1977/78.

### Rye Prices Recover After Tumbling

Responding to larger supply prospects and the weak grain market rye prices (Minneapolis No. 2) took a nose dive at harvest to \$1.70 per bushel in mid-August, about \$1.00 below a year ago. Prices bounced back to around \$2.30 as growers resisted prices below the \$1.50 per bushel farm loan level. About 800 thousand bushels of rye were under loan by early November.

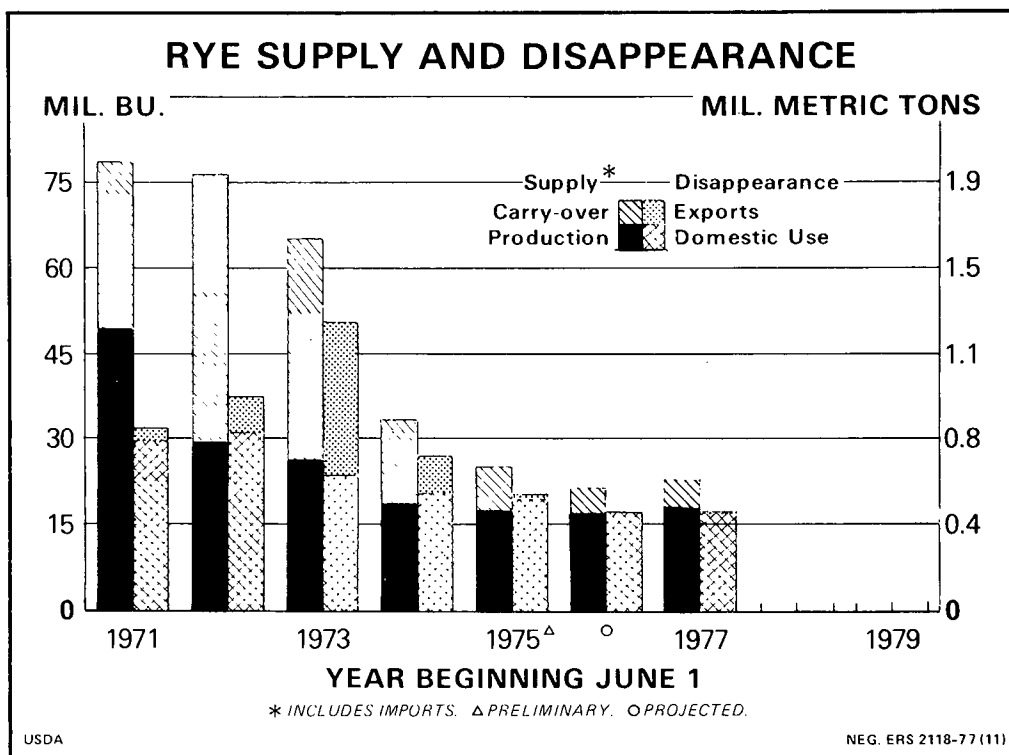




TABLE 2. --WHEAT: MARKETING YEAR SUPPLY AND DISAPPEARANCE, SPECIFIED PERIODS, 1973-77\*

YEAR AND PERIODS BEGINNING JUNE 1	SUPPLY				DISAPPEARANCE						ENDING STOCKS			
	BEGINNING STOCKS	PRODUCTION	IM-PORTS 1/	TOTAL	DOMESTIC USE					EX-PORTS 1/	TOTAL DISAPPEARANCE	GOVT. OWNED 5/	PRIVATELY OWNED 4/	TOTAL
					FOOD 2/	ALC. BEVERAGES 3/	SEED	FEED	TOTAL					
MILLION BUSHELS														
1973/74														
JUNE-SEPT.	597.1	1,705.2	0.5	2,302.8	175.5	6/	31.1	121.1	327.7	525.8	853.5	5.1	1,444.1	1,449.2
OCT.-DEC.	1,449.2	---	0.3	1,449.6	140.2	6/	28.9	12.6	181.8	340.5	522.3	4.9	922.4	927.3
JAN.-MAR.	927.3	---	0.3	927.6	135.1	6/	0.6	12.4	148.1	231.7	379.8	3.0	544.8	547.8
APR.-MAY	547.8	---	1.5	549.2	79.4	6/	23.5	-12.7	90.2	119.0	209.2	0.6	339.5	340.1
MKT. YEAR	7/597.1	1,705.2	2.6	2,304.9	530.3	6/	84.1	133.5	747.9	1,217.0	1,964.9	0.6	339.5	340.1
1974/75														
JUNE-SEPT.	340.1	1,796.2	2.2	2,138.4	171.3	6/	34.6	39.5	245.3	330.4	575.7	---	1,562.7	1,562.7
OCT.-DEC.	1,562.7	---	0.6	1,563.3	138.1	6/	31.9	2.7	172.7	283.0	455.7	---	1,107.5	1,107.5
JAN.-MAR.	1,107.5	---	0.4	1,107.9	123.3	6/	0.6	66.8	190.8	255.3	446.0	---	661.9	661.9
APR.-MAY	661.9	---	0.2	662.1	88.6	6/	25.5	-36.9	77.3	149.8	227.1	---	435.0	435.0
MKT. YEAR	340.1	1,796.2	3.4	2,139.6	521.4	6/	92.6	72.1	686.1	1,018.5	1,704.6	---	435.0	435.0
1975/76														
JUNE-SEPT.	435.0	2,134.8	0.7	2,570.5	186.3	6/	31.3	41.2	258.8	428.4	687.2	---	1,883.3	1,883.3
OCT.-DEC.	1,883.3	---	0.7	1,884.1	143.4	6/	32.8	-20.2	155.9	343.6	499.5	---	1,384.6	1,384.6
JAN.-MAR.	1,384.6	---	0.3	1,384.9	140.3	6/	0.7	61.1	202.1	247.3	449.4	---	935.6	935.6
APR.-MAY	935.6	---	0.6	936.2	88.7	6/	30.6	-1.0	118.3	153.7	272.0	---	664.2	664.2
MKT. YEAR	435.0	2,134.8	2.4	2,572.2	558.6	0.1	95.3	81.1	735.1	1,172.9	1,908.0	---	664.2	664.2
1976/77														
JUNE-SEPT.	664.2	2,147.4	0.9	2,812.5	188.5	6/	30.3	9.1	227.9	398.8	626.7	---	2,185.8	2,185.8
OCT.-DEC.	2,185.8	---	0.4	2,186.2	143.9	6/	31.8	9.7	185.4	220.6	406.0	---	1,780.1	1,780.1
JAN.-MAR.	1,780.1	---	0.4	1,780.5	138.4	6/	0.6	74.6	213.6	178.8	392.4	---	1,388.1	1,388.1
APR.-MAY	1,388.1	---	1.1	1,389.2	82.3	6/	25.3	19.1	126.7	151.6	278.3	---	1,110.8	1,110.8
MKT. YEAR	664.2	2,147.4	2.7	2,814.4	553.1	0.1	88.0	112.4	753.7	949.9	1,703.5	---	1,110.8	1,110.8
1977/78														
JUNE-SEPT.8/	1,110.8	2,027.3	0.8	3,138.9	181.5	6/	33.0	146.2	360.7	381.7	742.4	8.2	2,388.3	2,396.5
OCT.-DEC.														
JAN.-MAR.														
APR.-MAY														
MKT. YEAR														

1/ IMPORTS AND EXPORTS INCLUDE FLOUR AND OTHER PRODUCTS EXPRESSED IN WHEAT EQUIVALENT. 2/ USED FOR FOOD IN THE UNITED STATES, U.S. TERRITORIES, AND BY THE MILITARY. 3/ RESIDUAL; APPROXIMATES FEED USE. 4/ INCLUDES TOTAL LOANS. 5/ UNCOMMITTED, GOVERNMENT ONLY. 6/ LESS THAN 50,000 BUSHELS. 7/ EXCLUDES AN ABNORMALLY LARGE VOLUME OF GRAIN IN TRANSIT. 8/ PRELIMINARY. \*TOTALS MAY NOT ADD DUE TO ROUNDING.

TABLE 3--WHEAT CLASSES: MARKETING YEAR SUPPLY AND DISAPPEARANCE, 1974-77 1/

YEAR BEGINNING JUNE 1	SUPPLY			DISAPPEARANCE			ENDING STOCKS MAY 31
	BEGIN-	PRO-	TOTAL	DOMESTIC	EXPORTS	TOTAL	
	NING STOCKS	DUCTION	2/	USE	3/		
MILLION BUSHELS							
1974/75							
HARD WINTER	170	879	1,049	314	510	824	225
RED WINTER	23	288	311	138	136	274	37
HARD SPRING	87	293	382	148	130	278	104
DURUM	33	81	114	41	47	88	26
WHITE	27	255	283	45	195	240	43
ALL CLASSES	4/ 340	1,796	2,139	686	1,018	1,704	435
1975/76							
HARD WINTER	225	1,053	1,278	320	581	901	377
RED WINTER	37	343	380	159	165	324	56
HARD SPRING	104	326	431	153	160	313	118
DURUM	26	123	150	45	52	97	53
WHITE	43	290	333	58	215	273	60
ALL CLASSES	435	2,135	2,572	735	1,173	1,908	664
1976/77 5/							
HARD WINTER	377	968	1,345	324	418	742	603
RED WINTER	56	348	404	148	181	329	75
HARD SPRING	118	410	529	153	124	277	252
DURUM	53	135	190	63	41	104	86
WHITE	60	286	346	65	186	251	95
ALL CLASSES	664	2,147	2,814	753	950	1,703	1,111
1977/78 6/							
HARD WINTER	603	997	1,600	443	565	1,008	592
RED WINTER	75	341	416	160	180	340	76
HARD SPRING	252	396	649	153	150	303	346
DURUM	86	82	169	45	50	95	74
WHITE	95	211	306	57	155	212	94
ALL CLASSES	1,111	2,027	3,140	858	1,100	1,958	1,182

1/ DATA, EXCEPT PRODUCTION, ARE APPROXIMATIONS. 2/ TOTAL SUPPLY INCLUDES IMPORTS. 3/ IMPORTS AND EXPORTS INCLUDE FLOUR AND OTHER PRODUCTS IN WHEAT EQUIVALENT. 4/ EXCLUDES AN ABNORMALLY LARGE VOLUME OF GRAIN IN TRANSIT. 5/ PRELIMINARY. 6/ PROJECTED.

Table 4.--Summary of feed grains, wheat and related crops provisions under the omnibus Farm Bill  
(Program participation is voluntary)

Item	Agriculture and Consumer Protection Act of 1973 (applicable to 1974-77 crops)	Food and Agriculture Act of 1977 (applicable to 1978-81 crops)
	1977 crop	1978 crop
National allotment or program acreage	Allotment	Program acreage
Feed grains Mil. acres	89.0	To be announced
Wheat "	62.2	
Income support:		
Target prices--Basis for providing deficiency payments to program participants.		
Corn Dol. per bu.	1/2.00	2.10
Sorghum "	To be announced; barley and oats at discretion of Secretary of Agriculture.	To be announced; barley and oats at discretion of Secretary of Agriculture.
Barley "		
Oats "		
Wheat "		
	1/2.90	3.00-3.05 Lower target applies if crop is more than 1.8 billion bushels; higher rate if crop is less.
Payments made if average weighted U.S. rate received by farmers in first 5 months of marketing year is below target. Payment rate is the difference between the target and the higher of farm price or the loan. Maximum payment rate is difference between the target and loan.	Payments determined by multiplying the payment rate times the farm's crop allotment times the farm's program yield.	Payments determined by multiplying the allocation factor (80-100 percent) times the planted acreage for harvest times the farm's program yield times the payment rate.
Price support:		
National loan rate--Program participant puts up any part of crop as collateral for loan from Commodity Credit Corporation.	Applicable on all grain produced by program participant. Farmer bears cost of storage during first year of loan.	Applicable on all grain produced by program participant. Farmer bears cost of storage during first year of loan.
Corn Dol. per bu.	2.00	2.00
Sorghum "	1.90	1.90
Barley "	1.63	1.63
Oats "	1.03	1.03
Wheat "	2.25	2.25
Rye "	1.70	1.70
Soybeans "	3.50	*
		If U.S. average farm price in 1977/78 marketing year is below 105 percent of current loan, the Secretary of Agriculture may adjust loans down by as much as 10 percent to improve U.S. competitiveness in world markets. In this event, increased deficiency payments are required to provide producers the same total return if no adjustment had been made. These increased payments would be exempt from producer payment limitation.
Set-aside acreage	None required for 1974-77 crops. When required in earlier years, program participants set aside a specified percent of farm's crop allotment or base acreage.	Yes, 20 percent set aside has been announced for 1978 crop wheat. Participants are required to set aside 20 percent of 1978 wheat plantings to be eligible for program benefits. For example, if a farmer plants 500 acres of wheat, he must set aside 100 acres to soil conserving uses. A farmer's planting plus set aside cannot exceed his "normal" crop average described below. Decision on feed grain set-aside is forthcoming.
Farm allotments or program acreage	Based on 1959 and 1960 planted acreage for feed grains.	All farms will have a new "normal" crop average computed by ASCS from 1977 plantings of designated crops. These crops are to be announced but likely will include most soil depletion type crops.
Grain reserve program	A feed and food grain reserve program (farmer and government owned) of 30-35 million metric tons is planned. CCC will pay a substantial share of the storage costs for farmers entering a 3-5 year storage contract to extend their loans. For wheat, storage payments stop when prices reach 140 percent of the current loan and loans will be called when prices reach 175 percent of the loan. Proposed trigger prices are 125 percent and 140 percent of the loan for feed grains. More details will be announced when they become available.	Same as in 1977.
Loan operation		
Application period	Until May 31, 1978 for corn and sorghum; March 31 for others	To be announced.
Maturity date	9 months from loan approval date. 2/	To be announced.
Interest rate	6 percent per annum.	To be announced.
Sales price of CCC owned grain	When grain reserve program is in effect, CCC may not sell grain for less than 150 percent of loan--except under the Emergency Livestock Feed Program.	Same as in 1977.
Payment limits	\$20,000 per person.	\$40,000 per person, increases to \$50,000 by 1980.
Program yields		
Corn Bu. per acre	90.0	
Sorghum "	53.5	
Barley "	44.5	To be announced.
Wheat "	32.0	
Disaster payments for prevented plantings or low yields	Yes	Yes

1/ For any part of allotment not planted to wheat, the deficiency payment rate will be based on the "old" target price of \$2.47 per bushel. No deficiency payments will be made on 1977 crop corn since the loan rate and target price are set at the same level.

2/ Producers holding loans approved before November 7 have the option of continuing those loans for 11 months or reducing the loan period to 9 months.

\*Soybean loan to be announced.

Table 5.--Wheat: Current indicators of export movement, by program, coastal area and class of wheat, June-September 1976 and 1977

Period, program, and coastal area	Wheat (grain only)-Inspections for export 1/						
	Hard winter	Red winter	Hard spring	Durum	White	Mixed	Total
	- - - - Million bushels - - - -						
<u>June-September 1976</u>							
Dollars	110.3	77.2	48.1	23.7	44.4	2/	303.7
CCC Credit	11.1	0.3	0.9	---	4.2	---	16.5
Commercial	121.4	77.5	49.0	23.7	48.6	2/	320.2
P.L. 480	27.5	20.2	1.9	---	12.3	---	61.9
Total	148.9	97.7	50.9	23.7	60.9	2/	382.1
<u>June-September 1977</u>							
Dollars	136.2	47.5	53.5	15.9	41.9	2.4	297.4
CCC Credit	8.4	16.7	0.8	0.6	3.8	---	30.3
Commercial	144.6	64.2	54.3	16.5	45.7	2.4	327.7
P.L. 480	8.9	19.9	1.3	---	6.1	---	36.2
Total	153.5	84.1	55.6	16.5	51.8	2.4	363.9
<u>June-September 1976</u>							
Coastal areas:							
Great Lakes	0.1	4.1	19.9	4.8	0.6	---	29.5
Atlantic	---	28.1	---	2/	0.2	---	28.3
Gulf	107.0	65.5	13.4	7.0	---	2/	192.9
Pacific	41.8	---	17.6	11.9	60.1	---	131.4
Total	148.9	97.7	50.9	23.7	60.9	2/	382.1
<u>June-September 1977</u>							
Coastal areas:							
Great Lakes	2/	9.5	19.8	13.9	0.9	---	44.1
Atlantic	---	17.1	---	---	0.9	---	18.0
Gulf	136.3	57.5	16.9	2.0	---	2.4	215.1
Pacific	17.2	---	18.9	0.6	50.0	---	86.7
Total	153.5	84.1	55.6	16.5	51.8	2.4	363.9

1/ Based on weekly reports on inspections for export. Does not include rail or truck movement to Canada or Mexico.

2/ Less than 50,000 bushels.

Table 6.--Wheat: Cash prices for leading classes at major markets, 1976-77 <sup>1/</sup>

Major Market and Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
----- Dollars per bushel -----													
<u>No. 1 HRW, Kansas City</u>													
<u>Ordinary protein</u>													
1976/77	3.75	3.63	3.21	3.01	2.77	2.62	2.64	2.70	2.73	2.63	2.52	2.36	2.88
1977/78	2.31	2.35	2.31	2.47	2.56								
<u>13% protein</u>													
1976/77	4.10	3.96	3.45	3.35	3.09	3.02	2.99	2.99	3.01	2.89	2.75	2.62	3.18
1977/78	2.51	2.43	2.38	2.53	2.61								
<u>No. 2 SRW, Chicago</u>													
1976/77	3.47	3.37	3.01	2.89	2.72	2.60	2.66	2.73	2.74	2.63	2.53	2.35	2.81
1977/78	2.29	2.20	2.08	2.20	2.27								
<u>No. 2 SRW, St. Louis</u>													
1976/77	3.39	3.32	2.98	2.86	2.69	2.60	2.65	2.68	2.67	2.62	2.53	2.32	2.78
1977/78	2.15	2.14	1.97	2.01	2.28								
<u>No. 2 SRW, Toledo</u>													
1976/77	3.40	3.27	2.96	2.90	2.70	2.59	2.64	2.69	2.68	2.55	2.46	2.30	2.76
1977/78	2.21	2.13	2.03	2.08	2.21								
<u>No. 2 SW, Toledo</u>													
1976/77	3.35	3.24	2.94	2.89	2.71	2.57	2.64	2.70	2.69	2.54	2.45	2.29	2.75
1977/78	2.21	2.16	2.04	2.06	2.18								
<u>No. 1 SW, Portland</u>													
1976/77	3.60	3.58	3.35	3.25	3.02	2.94	2.78	2.88	2.98	2.95	2.96	2.93	3.10
1977/78	2.79	2.88	2.88	2.80	2.75								
<u>No. 1 DK. NS, Minneapolis</u>													
<u>Ordinary protein</u>													
1976/77	3.82	3.63	3.14	2.95	2.79	2.71	2.70	2.79	2.87	2.82	2.75	2.59	2.96
1977/78	2.43	2.29	2.22	2.51	2.61								
<u>15% protein</u>													
1976/77	4.75	4.44	3.79	3.56	3.41	3.30	3.14	3.13	3.15	3.13	3.09	2.91	3.48
1977/78	2.71	2.60	2.56	2.93	3.00								
<u>Hard amber durum, Mpls.(med.)</u>													
1976/77	4.23	4.05	3.51	3.33	3.16	3.14	2.96	2.97	3.05	3.10	3.09	3.03	3.30
1977/78	2.84	2.84	2.80	3.12	3.42								

<sup>1/</sup> On-track prices established at the close of the market.

Table 7--Wheat: Farm price, loan rate per bushel and price for equivalent quantity of major feed grain in region, 1976-77 <sup>1/</sup>

Item	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average	Support rate
- - - - Price for 60 pounds (bushel weight of wheat) - - - -														
<u>Central and So. Plains (Hd. winter) 2/</u>														
Wheat 1976/77	3.31	3.32	2.86	2.74	2.46	2.25	2.26	2.36	2.35	2.25	2.14	1.92	2.52	2.19
Sorghum 1976/77	2.54	2.66	2.42	2.43	2.17	1.92	2.06	2.14	2.14	2.15	2.06	1.93	2.22	1.49
Wheat 1977/78	1.94	1.98	1.94	2.06	<u>3/2.10</u>									2.19
Sorghum 1977/78	1.82	1.75	1.59	1.60	<u>3/1.64</u>									1.79
<u>Cornbelt (Soft red winter) 4/</u>														
Wheat 1976/77	3.21	3.14	2.79	2.74	2.49	2.27	2.40	2.46	2.46	2.39	2.25	2.18	2.56	2.29
Corn 1976/77	2.99	3.06	2.85	2.82	2.48	2.14	2.41	2.54	2.55	2.56	2.54	2.47	2.62	1.66
Wheat 1977/78	1.99	1.97	1.88	1.88	<u>3/1.92</u>									2.26
Corn 1977/78	2.30	2.01	1.74	1.70	<u>3/1.68</u>									1.93
<u>East and South (Soft red winter) 5/</u>														
Wheat 1976/77	3.24	3.22	2.83	2.83	2.54	2.27	2.35	2.40	---	---	---	1.93	2.62	2.25
Corn 1976/77	3.10	3.20	2.95	2.83	2.61	2.33	2.45	2.69	2.73	2.76	2.74	2.66	2.76	1.77
Wheat 1977/78	1.95	1.91	1.68	2.00	<u>3/2.10</u>									2.22
Corn 1977/78	2.58	2.20	1.85	1.84	<u>3/1.87</u>									2.03
<u>Northern Plains (Spring and durum) 6/</u>														
Wheat 1976/77	3.90	3.84	3.22	3.03	2.77	2.63	2.55	2.57	2.62	2.62	2.57	2.45	2.90	2.27
Barley 1976/77	3.22	3.21	3.11	3.16	2.95	2.81	2.70	2.85	2.71	2.79	2.85	2.64	2.92	1.40
Wheat 1977/78	2.25	2.16	2.16	2.28	<u>3/2.38</u>									2.26
Barley 1977/78	2.10	1.71	1.56	1.71	<u>3/1.78</u>									1.74
<u>Pacific Northwest (White) 7/</u>														
Wheat 1976/77	3.33	3.32	3.03	2.97	2.69	2.62	2.45	2.54	2.62	2.64	2.61	2.54	2.78	2.32
Barley 1976/77	3.04	3.11	2.89	2.92	2.82	2.58	2.57	2.79	2.91	2.68	2.61	2.51	2.79	1.65
Wheat 1977/78	2.47	2.52	2.55	2.45	<u>3/2.42</u>									2.31
Barley 1977/78	2.47	2.44	2.25	2.32	<u>3/2.19</u>									1.99
<u>U.S. Average</u>														
Wheat 1976/77	3.42	3.33	2.97	2.88	2.59	2.46	2.39	2.43	2.47	2.43	2.37	2.19	<u>8/ 2.85</u>	2.25
Wheat 1977/78	2.03	2.04	2.13	2.16	<u>3/2.26</u>									2.25

<sup>1/</sup> Simple averages with no adjustment made for relative feed value. Relative feeding value: Corn 1.00; wheat 1.05; barley .90; sorghum .95; reported in *Consumption of Feed by Livestock*, Production Research Report No. 79, ERS, USDA. <sup>2/</sup> Kansas, Nebraska, Texas, Oklahoma, and Colorado. <sup>3/</sup> Preliminary. <sup>4/</sup> Ohio, Indiana, Illinois, and Missouri. <sup>5/</sup> Pennsylvania, Maryland, Virginia, North Carolina, South Carolina, Georgia, Mississippi, Alabama, Louisiana, and Arkansas. <sup>6/</sup> North Dakota, South Dakota, and Minnesota. <sup>7/</sup> Washington, Oregon, and Idaho. <sup>8/</sup> Season average price including allowance for unredeemed loans and purchases by CCC.

Table 8---Wheat: Monthly average export prices at selected ports, 1974-77

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
----- Cents per bushel -----													
GULF PORTS: NO. 1 HARD RED WINTER, ORDINARY PROTEIN													
1974/75	424	460	456	464	523	510	506	447	417	400	390	359	446
1975/76	346	395	443	450	439	400	388	391	416	415	396	386	405
1976/77	398	387	345	327	303	290	288	296	301	291	278	259	314
1977/78	253	263	260	272	283								
BALTIMORE: NO. 1 SOFT RED WINTER													
1974/75	433	452	447	458	523	<u>1/</u>	485	427	407	385	376	330	429
1975/76	319	358	405	412	392	<u>354</u>	328	365	391	389	<u>1/</u>	<u>1/</u>	371
1976/77	<u>1/</u>	350	319	312	284	274	278	285	291	278	271	258	291
1977/78	244	230	222	231	246								
PORTLAND: NO. 2 WESTERN WHITE													
1974/75	450	479	466	468	533	522	514	459	421	399	393	356	455
1975/76	343	382	442	448	430	389	383	387	408	396	375	361	395
1976/77	362	364	342	331	306	299	284	294	305	298	302	299	316
1977/78	286	292	295	285	282								
DULUTH: NO. 2 NORTHERN SPRING, 14% PROTEIN													
1974/75	497	526	503	512	569	560	560	<u>1/</u>	<u>1/</u>	437	436	446	505
1975/76	426	456	489	493	477	434	435	422	444	438	422	425	447
1976/77	442	423	374	344	326	312	303	305	310	303	302	286	336
1977/78	267	256	254	278	290								

1/ No price quotes available.

Source: Grain Market News.

Table 9.--White Pan Bread: Estimated price and marketing spreads per one pound loaf and prices of ingredients, by months, 1977

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	* - - - - Cents per loaf - - - -											
Retail price (BLS)	35.3	35.3	35.2	35.7	35.5	35.3	35.6	35.6	35.7			
Marketing spreads <u>1/</u>												
Retailing	3.0	3.0	2.9	3.3	3.1	2.9	3.1	3.1	3.2			
Baking-wholesaling	24.6	24.7	24.7	24.7	25.0	25.3	25.5	25.4	25.3			
Flour milling	1.1	0.9	0.9	0.9	0.9	1.0	0.9	0.7	0.7			
Other spreads												
Wheat, farm to flour mill	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.6			
Other farm ingredients <u>2/</u>	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.3			
Flour, flour mill to baker	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4			
Non-farm ingredients <u>3/</u>	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8			
Farm-retail price spread	30.9	30.7	30.5	31.1	31.1	31.3	31.4	31.3	31.3			
Farm value of ingredients												
Wheat	2.7	2.8	2.9	2.7	2.5	2.2	2.4	2.5	2.6			
Other farm ingredients	1.7	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8			
Total farm value	4.4	4.6	4.7	4.6	4.4	4.0	4.2	4.3	4.4			
Prices of farm ingredients												
Flour												
F.o.b. bakery	4.8	4.7	4.7	4.6	4.3	4.2	4.2	4.1	4.3			
F.o.b. flour mill	4.4	4.3	4.3	4.2	3.9	3.7	3.8	3.8	3.9			
Wheat <u>4/</u>												
F.o.b. flour mill	3.2	3.4	3.4	3.2	3.0	2.7	2.9	3.0	3.2			
Farm value	2.7	2.8	2.9	2.7	2.5	2.2	2.4	2.5	2.6			
Other farm ingredients												
F.o.b. bakery	2.0	2.1	2.1	2.3	2.2	2.1	2.0	2.1	2.1			
Farm value	1.7	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8			
	- - - - Dollars per cwt. - - - -											
Prices of flour and millfeeds												
Flour, f.o.b. bakery	7.60	7.36	7.47	7.28	6.83	6.59	6.70	6.52	6.78			
Flour, f.o.b. flour mill	6.90	6.73	6.79	6.59	6.16	5.92	5.99	5.95	6.21			
Millfeeds, f.o.b. flour mill	4.81	4.59	4.11	4.57	4.20	4.52	3.49	2.59	3.04			
	- - - - Dollars per bushel - - - -											
Prices of wheat												
Wheat, f.o.b. flour mill	2.82	2.90	2.84	2.82	2.58	2.43	2.44	2.44	2.64			
Farm value	2.38	2.41	2.42	2.36	2.15	1.94	2.02	2.02	2.15			

1/ Differences between estimated prices received and paid for bread or ingredients. 2/ Includes processing, transportation, and merchandising for lard, vegetable shortenings, sugar, malt, and non-fat dry milk. Difference between estimated cost to baker and estimated farm value. 3/ Estimated cost to baker of yeast, yeast food, salt, and other non-farm ingredients. 4/ Price adjusted for value of millfeeds.

Note: Price spreads may not add due to independent rounding.



Table 10--Wheat and flour: Price relationships at milling centers annual and by periods, 1974-77

Year and periods	At Kansas City					At Minneapolis				
	Wholesale price of-					Wholesale price of-				
	Cost of wheat to produce 100 lb. of flour <u>1/</u>	Bakery flour per 100 lb. <u>2/</u>	Byprod-ucts obtained 100 lb. flour <u>3/</u>	Total products Actual	Over cost of wheat	Cost of wheat to produce 100 lb. of flour <u>1/</u>	Bakery flour per 100 lb. <u>2/</u>	Byprod-ucts obtained 100 lb. flour <u>3/</u>	Total products Actual	Over cost of wheat
----- Dollars -----										
<b>1974/75</b>										
June-Sept.	10.74	10.22	1.66	11.88	1.14	11.42	11.48	1.64	13.12	1.70
Oct.-Dec.	12.14	11.45	1.89	13.34	1.20	12.46	12.57	1.85	14.42	1.96
Jan.-Mar.	9.90	9.83	1.51	11.34	1.44	10.19	10.97	1.45	12.42	2.23
Apr.-May	8.94	8.77	1.39	10.16	1.22	10.11	10.11	1.40	11.51	1.40
Season average:	10.43	10.07	1.61	11.68	1.25	11.04	11.28	1.58	12.86	1.82
<b>1975/76</b>										
June-Sept.	9.64	9.15	1.48	10.63	.99	10.37	10.38	1.45	11.83	1.46
Oct.-Dec.	9.55	9.58	1.67	11.25	1.70	10.12	10.66	1.56	12.22	2.10
Jan.-Mar.	9.49	9.29	1.56	10.85	1.36	9.97	10.36	1.47	11.83	1.86
Apr.-May	9.03	8.88	1.53	10.41	1.38	9.68	10.16	1.54	11.70	2.02
Season average:	9.43	9.23	1.56	10.79	1.36	10.04	10.39	1.51	11.90	1.86
<b>1976/77</b>										
June-Sept.	8.47	8.31	1.70	10.01	1.54	8.98	9.64	1.76	11.40	2.42
Oct.-Dec.	6.92	7.05	1.71	8.76	1.84	7.16	8.04	1.72	9.76	2.60
Jan.-Mar.	6.75	6.70	1.63	8.33	1.58	7.02	7.78	1.66	9.44	2.42
Apr.-May	6.12	6.02	1.62	7.64	1.52	6.66	7.02	1.66	8.68	2.02
Season average:	7.06	7.02	1.66	8.68	1.62	7.46	8.12	1.70	9.82	2.36
<b>1977/78</b>										
June-Sept. <u>4/</u>	5.61	5.86	1.19	7.05	1.44	5.97	6.70	1.23	7.93	1.96

1/ Based on 73 percent extraction rate, cost of 2.28 bushels: At Kansas City, No. 1 Hard Winter, 13 percent protein, and at Minneapolis, No. 1 Dark Northern Spring, simple average of 13 percent and 15 percent protein. 2/ Quoted as 95 percent patent at Kansas City and standard patent at Minneapolis, bulk basis. 3/ Assumed 50-50 millfeed distribution between bran and shorts or middlings, bulk basis. 4/ Preliminary.

Compiled from reports of Agricultural Marketing Service and Bureau of Labor Statistics, Department of Labor.

Table 11--Cereal and bakery products: Retail price index, 1966-77

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average
(Index 1967 = 100)													
1966	96.8	96.9	99.0	99.9	99.8	100.1	100.3	100.3	100.0	100.1	100.0	100.3	99.5
1967	99.8	99.7	99.9	99.9	99.7	99.9	99.9	99.8	99.7	99.7	99.8	99.9	99.8
1968	100.1	100.6	100.9	101.1	101.1	101.4	101.4	101.7	101.9	102.3	102.4	102.6	101.5
1969	103.0	103.5	103.5	103.8	104.4	104.7	105.4	105.9	106.6	107.2	107.7	108.0	105.3
1970	108.2	108.7	109.8	110.2	111.0	111.2	111.6	112.4	112.8	113.0	113.9	114.1	111.4
1971	114.2	114.8	114.5	114.6	114.3	114.1	113.8	113.7	114.3	114.8	115.0	114.7	114.4
1972	114.5	114.4	114.4	114.6	114.6	115.0	115.8	116.3	117.8	119.0	120.2	122.1	116.6
1973	123.0	123.5	124.7	132.4	139.0	145.8	148.5	149.7	154.4	158.6	161.4	164.3	143.8
1974	165.3	166.7	168.2	170.4	174.7	177.6	181.7	185.3	187.3	189.1	188.9	187.0	178.5
1975	185.2	184.6	182.6	181.6	181.6	181.9	182.2	182.0	181.1	180.6	180.2	180.8	182.0
1976	181.3	180.9	180.3	180.4	180.1	179.9	179.3	179.9	180.0	181.3	182.6	182.5	180.7
1977	182.8	183.3	182.7	184.9									

Bureau of Labor Statistics, U.S. Department of Labor.

Table 12.--Wheat: Price support activity, cumulative, by months, 1973-77 crops <sup>1/</sup>

Item	Unit	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>1973</b>													
Placed under loan	Mil. bu.	5	32	42	51	55	58	60	60	60	60	60	60
Redeemed by farmers	"	---	3	14	18	21	25	32	56	58	59	60	60
Net under loan	"	5	29	28	33	34	33	28	4	2	1	2/	2/
Price above or below loan (\$1.25)	Dol.	1.18	1.22	3.20	3.37	2.97	2.95	3.53	4.04	4.27	3.71	2.73	2.27
<b>1974</b>													
Placed under loan	Mil. bu.	4	14	22	29	31	32	34	35	36	36	36	36
Redeemed by farmers	"	2/	2/	2	4	8	11	13	17	19	22	26	32
Net under loan	"	4	14	20	25	23	21	21	18	17	14	10	4
Price above or below loan (\$1.37)	Dol.	2.32	2.67	2.87	2.95	3.48	3.50	3.28	2.74	2.58	2.28	2.32	2.10
<b>1975</b>													
Placed under loan	Mil. bu.	2/	12	16	18	24	26	39	46	47	47	48	48
Redeemed by farmers	"	---	2/	3	4	5	6	8	11	15	20	24	27
Net under loan	"	2/	12	13	14	19	20	31	35	32	27	24	21
Price above or below loan (\$1.37)	Dol.	1.55	1.96	2.52	2.74	2.65	2.21	2.04	2.06	2.29	2.28	2.13	2.06
<b>1976</b>													
Placed under loan	Mil. bu.	1	8	22	44	82	148	226	273	301	341	363	468
Redeemed by farmers	"	---	2/	2/	1	2	3	5	9	16	26	38	55
Net under loan	"	1	8	22	43	80	145	221	264	285	315	325	413
Price above or below loan (\$2.25)	Dol.	1.17	1.08	.72	.63	.34	.21	.14	.18	.22	.18	.12	-.06
<b>1977</b>													
Placed under loan	Mil. bu.	45	187	327	407								
Redeemed by farmers	"	---	2/	1	6								
Net under loan	"	45	187	326	401								
Price above or below loan (\$2.25)	Dol.	-.22	-.21	-.12	.09								

<sup>1/</sup>Based on operating reports.<sup>2/</sup> Less than 500,000 bushels.

Table 13.--Wheat: Rotterdam, c.i.f., quotations for cargoes/parcels  
in nearest shipment position, by months, 1973-77 1/

Year beginning	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
- - - - Dollars per metric ton - - - -													
Canadian No. 1 CWRS - 13.5													
1973	132	167	202	228	222	205	222	239	244	240	214	185	208
1974	204	216	216	213	234	237	232	209	198	182	192	193	210
1975	195	205	210	228	219	NQ	NQ	NQ	NQ	<u>2/174</u>	<u>2/166</u>	<u>2/169</u>	196
1976	<u>2/188</u>	<u>2/175</u>	158	155	145	141	137	144	146	135	133	134	149
1977	127	121	117	129									
United States No. 2 Hard Winter, 13.5%													
1973	121	144	203	212	206	200	223	230	232	224	183	170	196
1974	177	191	194	204	230	229	219	195	180	176	159	146	192
1975	146	174	188	195	185	173	166	168	183	183	176	169	176
1976	172	176	159	150	139	131	132	135	133	132	130	121	142
1977	114	116	116	117									
United States Dark Northern Spring, 14%													
1973	132	146	193	201	194	198	224	240	240	228	182	180	196
1974	209	214	217	214	233	233	228	204	192	179	182	181	207
1975	175	185	196	204	193	182	187	183	195	194	174	178	187
1976	181	176	158	148	138	137	139	146	148	134	130	127	147
1977	115	111	110	122									

1/ Hamburg Mercantile Exchange prices for Rotterdam. Averages: Basis daily market quotes. 30 days delivery.

2/ Canadian Western Spring Wheat (CWRS)--No. 2--12.5 protein.

NQ - Not quoted.

Compiled from Foreign Agriculture Grain Circular, Foreign Agriculture Service.

TABLE 14.--RYE: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1972-77

YEAR BEGINNING JUNE 1	SUPPLY				DISAPPEARANCE						ENDING STOCKS MAY 31			
	BEGIN- NING STOCKS	PRO- DUCTION	IMPORTS	TOTAL	DOMESTIC USE					TOTAL DISAPPEAR- ANCE	PRIVATELY OWNED 2/	GOVT. 3/	TOTAL	
					FOOD	SEED	INDUSTRY	FEED 1/	TOTAL					EXPORTS
1,000 BUSHELS														
1972/73	46,980	29,183	154	76,217	5,122	5,321	3,038	17,385	30,866	6,535	37,401	38,816	---	38,816
1973/74	38,816	26,263	1	65,080	6,250	4,980	2,547	9,615	23,392	27,513	50,905	14,175	---	14,175
1974/75	14,175	19,293	277	33,745	5,459	5,040	1,386	8,773	20,658	6,465	27,123	6,622	---	6,622
1975/76	6,622	17,875	944	25,441	4,172	4,790	2,060	8,787	19,809	1,117	20,926	4,515	---	4,515
1976/77 4/	4,515	16,867	248	21,430	3,696	4,723	1,930	6,528	16,877	38	16,915	4,515	---	4,515
1977/78 5/	4,515	18,242	203	22,957	3,600	4,700	2,000	7,500	17,800	100	17,900	N.A.	N.A.	5,057
ACREAGE														
				YIELD PER HARVESTED ACRE			SEASONAL PRICES			NATIONAL AVG. LOAN RATE				
PLANTED		HARVESTED					RECEIVED BY FARMERS		MINNEAPOLIS, NO. 2					
- - - 1,000 BUSHELS - - -				BUSHELS			- - - - - DOLLARS PER BUSHEL - - - - -							
1972/73	3,540		1,084		26.9			.96		1.08		.89		
1973/74	3,545		1,033		25.4			1.91		2.51		.89		
1974/75	3,200		897		21.5			2.51		2.89		.89		
1975/76	3,166		814		22.0			2.36		2.84		.89		
1976/77 4/	2,954		804		20.7			2.46		2.87		1.20		
1977/78 4/	2,913		785		23.2			5/ 1.50-2.00				1.50		

1/ RESIDUAL; ROUGHLY APPROXIMATES TOTAL FEED USE. 2/ INCLUDES TOTAL LOANS. 3/ UNCOMMITTED, GOVERNMENT ONLY. 4/ PRELIMINARY. 5/ PROJECTED. N.A.=NOT AVAILABLE.

TABLE 15.--RYE: MARKETING YEAR SUPPLY AND DISAPPEARANCE, SPECIFIED PERIODS, 1973-77\*

YEAR AND PERIODS BEGINNING JUNE 1	SUPPLY				DISAPPEARANCE						ENDING STOCKS			
	BEGINNING STOCKS	PRODUCTION	IM-PORTS	TOTAL	DOMESTIC USE					EX-PORTS	TOTAL DISAPPEARANCE	GOVT. OWNED <sup>2/</sup>	PRI-VATFLY OWNED <sup>3/</sup>	TOTAL
					FOOD	ALC. BEVER-AGES	SEED	FEED <sup>1/</sup>	TOTAL					
MILLION BUSHELS														
1973/74														
JUNE-SEPT.	38.8	26.3	---	65.1	2.0	0.8	2.3	7.8	13.0	15.3	28.3	0.1	36.7	36.3
OCT.-DEC.	36.8	---	---	36.8	1.6	0.6	2.3	1.0	5.5	9.9	15.4	<u>4/</u>	21.4	21.4
JAN.-MAR.	21.4	---	<u>4/</u>	21.4	1.7	0.7	0.2	0.8	3.4	0.1	3.5	---	17.9	17.3
APR.-MAY	17.9	---	---	17.9	1.0	0.4	0.1	0.1	1.5	2.2	3.7	---	14.2	14.2
MKT. YEAR	38.8	26.3	<u>4/</u>	65.1	6.3	2.5	5.0	9.6	23.4	27.5	50.9	---	14.2	14.2
1974/75														
JUNE-SEPT.	14.2	19.3	<u>4/</u>	33.5	1.9	0.4	2.4	3.9	8.5	4.2	12.8	---	20.7	20.7
OCT.-DEC.	20.7	---	---	20.7	1.4	0.4	2.3	2.4	6.5	2.2	8.7	---	12.0	12.0
JAN.-MAR.	12.0	---	<u>4/</u>	12.0	1.3	0.3	0.3	1.9	3.8	<u>4/</u>	3.9	---	8.2	8.2
APR.-MAY	8.2	---	0.3	8.5	0.8	0.3	0.1	0.6	1.8	<u>4/</u>	1.8	---	6.6	6.5
MKT. YEAR	14.2	19.3	0.3	33.7	5.5	1.4	5.0	8.8	20.7	6.5	27.1	---	6.6	6.5
1975/76														
JUNE-SEPT.	6.6	17.9	0.2	24.7	1.4	0.4	2.3	4.3	8.4	0.7	9.1	---	15.7	15.7
OCT.-DEC.	15.7	---	0.2	15.9	1.1	0.7	2.2	2.1	6.1	0.3	6.4	---	9.5	9.5
JAN.-MAR.	9.5	---	<u>4/</u>	9.5	1.1	0.5	0.2	1.7	3.5	<u>4/</u>	3.5	---	6.0	6.0
APR.-MAY	6.0	---	0.5	6.5	0.6	0.5	0.1	0.7	1.8	0.1	2.0	---	4.5	4.5
MKT. YEAR	6.6	17.9	0.9	25.4	4.2	2.1	4.8	8.8	19.8	1.1	20.9	---	4.5	4.5
1976/77														
JUNE-SEPT.	4.5	16.7	0.2	21.4	1.2	0.5	2.3	2.4	6.4	<u>4/</u>	6.4	---	15.0	15.0
OCT.-DEC.	15.0	---	<u>4/</u>	15.0	1.0	0.5	2.2	2.1	5.7	<u>4/</u>	5.7	---	9.3	9.3
JAN.-MAR.	9.3	---	<u>4/</u>	9.3	0.9	0.6	0.2	1.1	2.9	<u>4/</u>	2.9	---	6.4	6.4
APR.-MAY	6.4	---	---	6.4	0.5	0.4	0.1	0.9	1.9	<u>4/</u>	1.9	---	4.5	4.5
MKT. YEAR	4.5	16.7	0.2	21.4	3.7	1.9	4.7	6.5	16.9	<u>4/</u>	16.9	---	4.5	4.5
1977/78 <sup>5/</sup>														
JUNE-SEPT.	4.5	18.2	0.1	22.9	1.2	0.6	2.3	4.1	8.2	<u>4/</u>	8.2	---	14.7	14.7
OCT.-DEC.														
JAN.-MAR.														
APR.-MAY														
MKT. YEAR														

1/ RESIDUAL: ROUGHLY APPROXIMATES TOTAL FEED USE. 2/ UNCOMMITTED, GOVERNMENT ONLY. 3/ INCLUDES TOTAL LOANS. 4/ LESS THAN 50,000 BUSHELS. 5/ PRELIMINARY.

\*TOTALS MAY NOT ADD DUE TO ROUNDING.

Table 16.--Rye: Flour and cash prices, 1973-77

Year beginning	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
MINNEAPOLIS, WHITE FLOUR (Dollars per cwt.)													
1973	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	10.15	7.85	7.59	8.53
1974	8.48	9.21	8.58	8.94	9.08	8.78	8.55	8.37	8.18	7.65	7.49	7.26	8.38
1975	6.78	7.01	8.21	8.30	8.35	7.98	7.70	7.86	7.85	8.02	8.01	8.18	7.85
1976	8.94	9.04	8.64	8.60	8.25	8.20	8.24	8.62	8.76	8.82	8.85	8.70	8.64
1977	8.14	6.99	6.52	6.96	7.65								
MINNEAPOLIS NO. 2 (Dollars per bushel)													
1973	1.32	1.60	2.17	2.79	2.65	2.46	2.86	3.44	3.38	3.16	2.21	2.09	2.51
1974	2.57	2.97	2.89	3.07	3.25	3.19	3.05	2.93	2.80	2.56	2.72	2.70	2.89
1975	2.49	2.58	3.04	3.03	3.01	2.86	2.73	2.82	2.81	2.89	2.88	2.96	2.84
1976	3.24	3.22	2.88	2.90	2.77	2.68	2.70	2.77	2.80	2.82	2.82	2.79	2.87
1977	2.53	1.94	1.79	2.06	2.28								
WINNIPEG NO. 3 CANADIAN WESTERN (Dollars per bushel)													
1973	1.97	2.52	2.72	3.21	2.70	2.56	3.02	3.51	3.33	3.17	2.55	2.50	2.81
1974	2.91	3.04	2.83	2.90	3.34	3.11	2.91	2.72	2.40	2.10	2.13	2.07	2.70
1975	2.08	2.28	2.94	3.02	2.60	2.33	2.25	2.36	2.56	2.58	2.46	2.55	2.50
1976	2.85	3.02	2.57	2.61	2.38	2.21	2.19	2.25	2.35	2.34	2.35	2.30	2.45
1977	2.20	2.01	1.56	1.82									

N.A. = Not available.

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WS-242

NOVEMBER 1977

### Weights, Measures and Conversion Factors

**Bushel weights:**

Wheat & soybeans = 60 lbs.

Corn, sorghum & rye = 56 lbs.

Barley (grain) = 48 lbs.: malt = 34 lbs.

Oats = 32 lbs.

1,000 kilograms

36.7437 bushels wheat or soybeans

39.3679 bushels corn, sorghum, or rye

45.9296 bushels barley

68.8944 bushels oats

**Bushels to metric tons:**

Wheat & soybeans = bushels x .027216

Barley = bushels x .021772

Corn, sorghum, rye = bushels x .025400

Oats = bushels x .014515

**Area:**

1 Acre = .404694 hectares

1 Hectare = 2.4710 acres

**1 Metric ton equals:**

2204.622 lbs.

22.046 hundredweight

10 quintals

**Yields:**

Wheat = bushels per acre x 0.6725 = quintals per hectare

Rye, corn = bushels per acre x 0.6277 = quintals per hectare

Barley = bushels per acre x 0.5380 = quintals per hectare

Oats = bushels per acre x 0.3587 = quintals per hectare