

WHEAT Situation



TABLE 1.--WHEAT: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1966-70 AVERAGE AND ANNUAL 1970-76 *

YEAR BEGINNING JULY 1	SUPPLY				DISAPPEARANCE						ENDING STOCKS JUNE 30		
	BEGIN- NING STOCKS	PRO- DUCTION	IMPORTS 1/	TOTAL	DOMESTIC USE			EXPORTS 1/	TOTAL DISAPPEAR- ANCE	PRIVATELY HELD	GOVT. 4/	TOTAL	
					FOOD 2/	SEED 3/	FEED 3/						
MILLION BUSHELS													
1966-70 (AVG.)	640	1,433	1	2,074	516	66	134	716	679	1,395	187	492	679
1970/71	885	1,351	1	2,237	519	62	187	768	738	1,506	162	569	731
1971/72	731	1,618	1	2,350	526	63	266	855	632	1,487	149	714	863
1972/73	863	1,545	1	2,409	528	67	190	785	1,186	1,971	227	211	438
1973/74	438 5/	1,705	4	2,147	528	84	140	752	1,148	1,900	228	19	247
1974/75 6/	247	1,796	2	2,046	525	88	67	680	1,039	1,719	325	2	327
1975/76 7/	327	2,134	2	2,463	530	90	77- 52	697- 672	1,300- 1,400	1,997- 2,072	---	---	466- 391
ACREAGE				YIELD PER HARVESTED ACRE			SEASONAL PRICES RECEIVED			GOVT. PRICE SUPPORT OPERATIONS			
ALLOTMENT	SET-ASIDE	PLANTED	HARVESTED	PARTICIPATING FARMERS	PARTICIPATING FARMERS 8/	NON- PARTICIPATING FARMERS 8/	NATIONAL AVG.	LOAN RATE	SUPPORT PAYMENT 9/				
MILLION ACRES				BUSHELS			DOLLARS PER BUSHEL						
1966-70 (AVG.)	55.2	12.1	57.1	50.7	28.3	1.97	1.37	1.25	.60				
1970/71	45.5	15.9	48.7	43.6	31.0	2.08	1.33	1.25	.75				
1971/72	19.7	13.6	53.8	47.7	33.9	1.88	1.34	1.25	.54				
1972/73	19.7	20.1	54.9	47.3	32.7	2.23	1.76	1.25	.47				
1973/74	18.7	7.4	59.0	53.9	31.7	4.16	3.95	1.25	.21				
1974/75	55.0	---	71.4	65.6	27.4	4.09	4.09	1.37	---				
1975/76 6/	53.5	---	75.1	69.7	30.6	3.49	3.49	1.37	---				
1976/77 6/	61.6												

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 AT HOME AND ABROAD. 3/ RESIDUAL; APPROXIMATES FEED USE AND INCLUDES NEGLIGIBLE QUANTITIES USED FOR DISTILLED SPIRITS AND BEER. 4/ UNDER LOAN TO OR OWNED BY CCC. 5/ EXCLUDES AN ABNORMALLY LARGE VOLUME OF GRAIN IN TRANSIT. 6/ PRELIMINARY. 7/ FORECAST. 8/ SEASON AVERAGE PRICE RECEIVED BY FARMERS AS REPORTED BY THE STATISTICAL REPORTING SERVICE. 9/ DOES NOT INCLUDE SET-ASIDE OR DISASTER PAYMENTS. DOMESTIC CERTIFICATE PAYMENTS PRIOR TO 1974/75; BEGINNING IN 1974/75, GUARANTEED PAYMENTS UNDER TARGET PRICE PROGRAM WHEN APPLICABLE. * TOTALS MAY NOT ADD DUE TO ROUNDING.

THE WHEAT SITUATION

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SUMMARY

Midway through the 1975/76 crop year, stocks are the largest in 3 years, a record demand year is in progress, and 1976 potential acreage in wheat is the largest in nearly a quarter century.

January 1 stocks of wheat totaled 1,385 million bushels, 25 percent above a year ago and the largest since the winter of 1973. Around 40 percent of the total was still on farms, about the same as a year ago.

Total disappearance during July-December of 1.1 billion bushels was the second largest on record for that period. Domestic use showed moderate gains from a year ago in all categories except feed. Exports were exceptionally heavy, totaling around 700 million bushels, a fourth ahead of last year's pace. An important factor in the surge was the loading of close to 125 million bushels for the USSR or about 80 percent of their purchases to date. India, Japan, and Brazil were also large buyers.

Demand for the remainder of the year is expected to continue heavy, although it may tail off from the July-December pace. Domestic use may slip to below 300 million bushels. Mill grind is expected to follow the seasonal pattern and weaken. Seed use for January-June will be less as spring wheat accounts for only around a fourth of the planted acreage; since wheat prices continue well above feed grain prices, wheat feeding will be limited.

Exports during January-June are expected to continue heavy. But the attainment of the predicted record export level of 1.3-1.4 billion bushels for 1975/76 will be contingent on a number of factors: the amount of competition from Southern Hemisphere exporters; the extent of additional wheat sales to the USSR; the size of PL-480 sales; and the anticipated adequacy of supplies in the new crop year. Even if total disappearance during 1975/76 reaches the projected level of over 2 billion bushels, carryover stocks may still range from 390 to 465 million bushels compared with 327 million on July 1, 1975.

After declining from September highs, wheat prices to farmers leveled out in December and January, averaging around \$3.40 per bushel, some 70 cents below a year earlier. If the export demand

continues heavy and it becomes evident that exports will be record large, and if concern heightens about 1976 crop prospects, wheat prices could rise some from current levels. However, if exports lag and a sizable buildup in stocks looms ahead along with favorable 1976 crop developments, prices to farmers could weaken, possibly nearing last season's harvesttime lows of below \$3.00 per bushel.

Acreage seeded to 1976 winter wheat and planting intentions for the spring crop total 77.2 million acres, the largest since 1953. Winter wheat acreage at 57.2 million is up 2 percent from a year ago while spring wheat intentions as of January 1 are up 6 percent. Dry weather last fall and extreme cold in some areas have caused concern about

winter wheat yields. The winter crop, as of last December, was estimated to be 9 percent below 1975's. The total 1976 wheat crop will fall short of 1975's record harvest of 2.1 billion bushels, unless growing conditions improve. U.S. wheat exports are expected to continue strong in 1976/77. Some improvement is expected in domestic demand as wheat feeding expands.

The 1975 world wheat crop is currently estimated at 340 million metric tons, down 3 percent from a year ago. A sharp reduction in the USSR and European harvests more than offset good crops in many other countries. Trade is projected at a record 76 million tons, 11 percent above last year. The increase is due to heavier USSR purchases of roughly 14 million tons.

THE CURRENT SITUATION

Wheat Stocks Up, but Disappearance Heavy

Wheat stocks on January 1 totaled 1,385 million bushels, 25 percent above a year earlier. Farm stocks of wheat continued relatively large, accounting for around 40 percent of the total or about the same as a year earlier. Farm-held stocks were especially large in the Northern Plains States.

Disappearance during July-December of 1,078 million bushels was the second heaviest on record, exceeded only in that period in 1973. Exports continued to dominate, totaling nearly 700 million bushels. At least part of the heavy movements can be attributed to the stepped up shipments to the USSR, but in general they are an indication of the world's strong demand for wheat.

Wheat mill grind this crop year continues well above year earlier levels. For the first 6 months, 287 million bushels of wheat were milled for domestic food use, around 6 percent ahead of last year's pace. Although wheat food use appears to be recovering after last year's slump, it is difficult to estimate how much of the increase is due to increased consumption and how much to inventory adjustments.

Seed requirements were heavy during July-December, reflecting the largest plantings of winter wheat since 1949. (See "Outlook for 1976/77"). Although the demand for feed began to expand for cattle and poultry during July-December, wheat feeding continued to lag. As shown in table 6, the sharp rise in wheat prices last summer quickly erased any apparent competitive advantage wheat had over feed grains. Because of some local shortages of feed grains, some wheat has continued to be fed. However, this has been minimal—the July-December wheat feeding estimate was only around 35 million bushels.

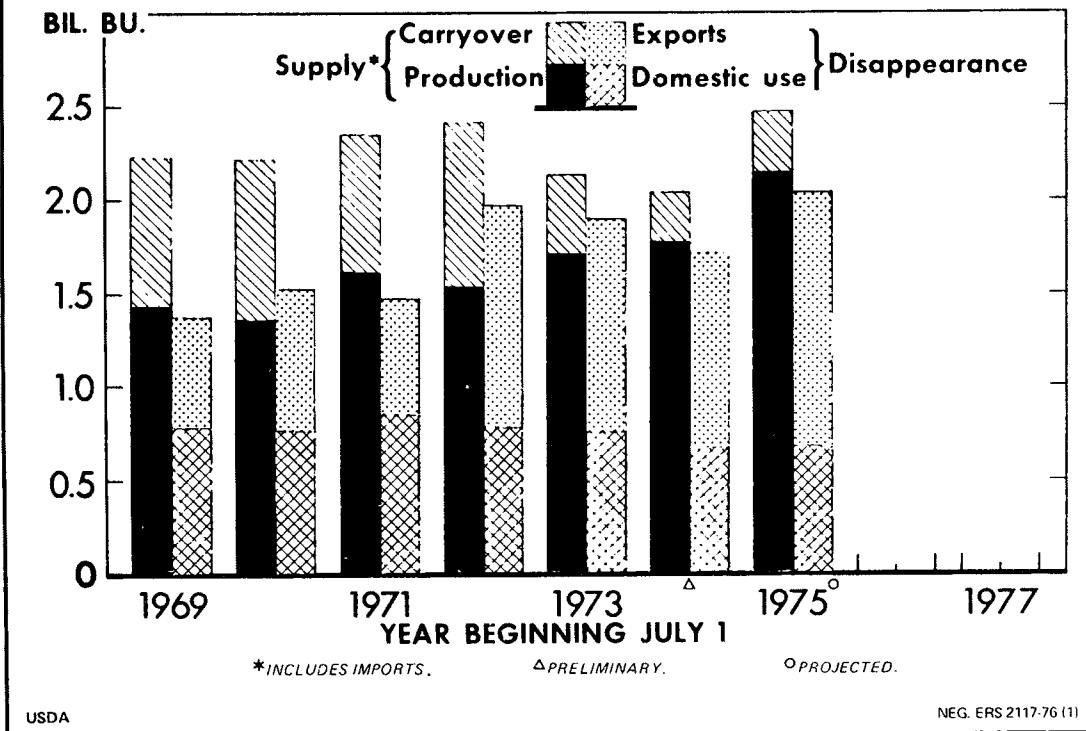
Wheat: Supply and distribution

Item	July-December	
	1974	1975
	Million bushels	Million bushels
July 1 stocks	247	327
Production	1796	2134
Imports	2	2
Total supply	2,045	2,463
Exports	552	690
Food	270	287
Seed	61	65
Feed	54	36
Total disappearance	937	1,078
January 1 stocks	1,108	1,385

What about disappearance during this January-June? Do we have enough wheat to meet predicted needs with some cushion for stocks? January 1 stocks totaled 1,385 million bushels. Demand is expected to continue heavy, possibly equaling the all-time January-June disappearance high of 962 million bushels set in 1973.

If the 1975/76 export estimate of 1.3-1.4 billion bushels is to be realized, exports must hold near the heavy pace of the first 6 months. As of mid-January, over 700 million bushels had been shipped, with another 270 million bushels on the sales books. This is in sharp contrast to the 2 preceding years when total commitments at this time were much closer to or in excess of the official export estimate. This difference is due to the fact that many countries apparently are waiting for lower prices.

WHEAT SUPPLY AND DISAPPEARANCE



The greater apparent abundance of wheat supplies in the major exporting countries this year has cooled some of the speculative buying and holding of commodities. Assurances of access to our grain supplies have resulted in less over-booking as insurance against export controls. These factors, among others, have contributed to smaller commitments thus far. Many countries seemingly feel that the increased availability warrants a "wait and see" attitude on purchases. They suspect that prices may weaken as a result of the improved level of supplies.

Factors which will affect the level of U.S. exports for the remainder of the crop year and the ultimate export total will be sales and shipments to the USSR and PL-480 sales. To date the USSR has purchased 4.4 million tons (160 million bushels), and the projected export level of 1.3-1.4 billion bushels is partly contingent on another larger sale. PL-480 shipments of wheat in 1975/76 have been programmed at around 180 million bushels. But grain production has been good in many of the aid recipient countries and, during July-December, only around 45 million bushels actually moved. Thus, the pace of PL-480 sales are expected to be stepped up in the months ahead.

Domestic use during the January-June period may tail off significantly from the first half. Mill

grind, following the normal seasonal pattern, is expected to weaken in the months ahead. On the basis of prospective spring wheat plantings, seed use for January-June will exceed last year's. Since wheat is expected to be priced above feed grains, any expansion in wheat feeding would have to wait until new crop wheat becomes available next season.

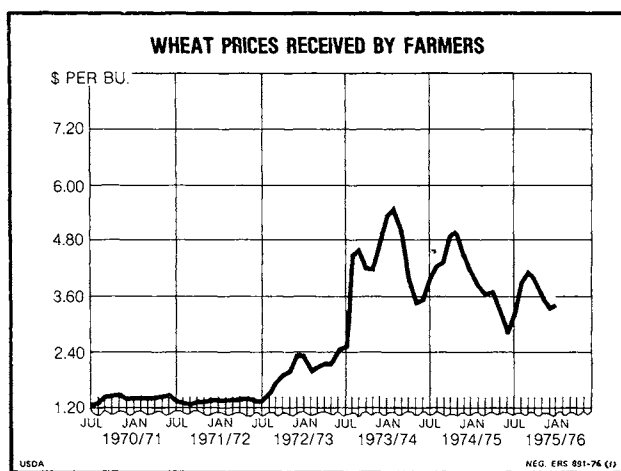
The weakness in domestic use is expected to be more than offset by continued strong exports resulting in a total wheat disappearance in 1975/76 at an all-time high of around 2.0-2.1 billion bushels. This would surpass the old record set in 1972/73.

Even if disappearance rises to over 2.0 billion bushels, a portion of the 1975 harvest will be added to stocks. That would make this the second consecutive year of increased stocks since the modern low of 247 million bushels was set in the summer of 1974. Still, the projected level of around 390-465 million bushels would be relatively small. Since wheat prices are expected to be well above the loan rate, most of the year-ending stocks would be privately held.

Wheat Prices Down From Season's Highs

Wheat prices to farmers the first half of the season followed a pattern not too different from

that experienced during the 1974/75 crop year. In both 1974 and 1975 some concern about the crop and good news on the export side pulled wheat prices out of a harvesttime slump to high levels in the fall. Prices appear to have peaked somewhat earlier in 1975/76 than they did the preceding crop year, but the magnitude of the increase was virtually the same. Following the fall high in 1974/75, prices continued to deteriorate, bottoming out by harvesttime at roughly 40 percent below the season's high. By mid-December 1975, farm wheat prices had fallen about 20 percent from the high set in September 1975. January mid-month farm prices continued at around \$3.40 per bushel. However, uncertainty about 1976 crop prospects and pressure on readily available supplies as exporters and domestic users covered forward needs, is resulting in higher wheat prices to farmers in late January and early February.



But will prices continue to firm or will they return down the path that was traced last year? The following factors will influence prices for the remainder of 1975/76 crop year.

The pace of exports—If the 1.3-1.4 billion export range is to be reached, weekly shipments must continue at the heavy pace of the July-December period. Exporters will be purchasing wheat from an ever-shrinking total supply. This fact alone tends to add support to wheat prices. A continuation of the orderly marketing by farmers could accentuate this firmness. However, if exports lag, prices could weaken.

The adequacy of world grain supplies—Forward sales to many countries have lagged this year, as a “wait and see” attitude prevails. Whether this attitude is based on the anticipation of lower prices, the improved supply situation in many countries, or a combination of the two is uncertain, but in any case this could result in eventual weakness in world wheat prices.

The 1976 crop prospects—Attention is again focused on the winter wheat crops in both the United States and the USSR. Acreages in both countries are large, but yield prospects are clouded at this time. If winter wheat crop conditions improve and a large spring wheat crop seems likely, farmers might become more willing sellers. Buyers might delay purchases or possibly lower their bids in anticipation of more plentiful supplies. A combination of these factors, along with some lag in exports, could result in prices to farmers weakening and possibly nearing the harvesttime lows of below \$3.00 per bushel during the summer of 1975. On the other hand, if 1976 crop prospects worsen, old crop wheat prices could strengthen and any significant downward adjustments probably would not take place until 1976 wheat crop supplies saturate the market.

Loan Activity Light; Record Year For Returns

Strong wheat prices along with higher interest rates on price support loans continue to discourage use of the loan program. Through the end of December, only 39 million bushels had been put under loan. Loans had been repaid on about 8 million bushels. Under the “anniversary loan provision,” loans mature approximately 11 months from the entry date; thus some of the wheat currently under loan could still be there well into the 1976/77 crop year. However, because prices are expected to average above the loan rate, CCC (Commodity Credit Corporation) probably will not take over any of this wheat.

Wheat prices to farmers, estimated at about \$3.50 per bushel for 1975/76, are down from the level of the last 2 years. However, marketings from the record 1975 crop are large enough to push the gross value to a record \$7.4 billion. This is the third consecutive year of gross returns in excess of \$7.0 billion. However, the costs of production for wheat continue upward. (See Costs of Producing Wheat in 1974, page 17.

Gross farm value of wheat

Crop year	Value of production	Government payments ¹	Gross value
	Million dollars	Million dollars	Million dollars
1968/69	1,929	746	2,675
1969/70	1,796	792	2,588
1970/71	1,802	811	2,613
1971/72	2,167	878	3,045
1972/73	2,704	723	3,427
1973/74	6,719	375	7,094
1974/75	7,338	---	7,338
1975/76	7,435	---	7,435

¹ Excludes set aside and disaster payments.

With farm wheat prices averaging \$ 3.79 per bushel during the first 5 months, well above the target price level of \$2.05, no deficiency payments were made on the 1975 crop.

Wheat Exports Value Highest on Record

Exports of agricultural products have been an important source of foreign exchange in recent years. The United States can rightfully lay claim to the title of "bread basket of the world," supplying from 40 to 50 percent of the wheat moving in world trade channels. In fiscal 1975 the value of U.S. wheat exports exceeded \$5 billion for the first time, accounting for about 23 percent of the total value of U.S. agricultural trade.

Wheat: Value of exports, 1950-75

Fiscal Year	Wheat and wheat products	Fiscal Year	Wheat and wheat products
	Million dollars		Million dollars
1949/50	685	1962/63	1,161
1950/51	750	1963/64	1,522
1951/52	1,074	1964/65	1,255
1952/53	687	1965/66	1,431
1953/54	451	1966/67	1,341
1954/55	496	1967/68	1,306
1955/56	595	1968/69	924
1956/57	960	1969/70	965
1957/58	728	1970/71	1,225
1958/59	779	1971/72	1,071
1959/60	873	1972/73	2,387
1960/61	1,155	1973/74	4,738
1961/62	1,288	1974/75	5,001

Wheat Food Use Up As Commodity Prices Ease

Although food use of wheat normally receives less attention than exports and in recent years has totaled less than half the annual exports, it still provides a stable and relatively predictable outlet.

Preliminary indications on the supply and utilization of wheat flour for calendar 1975 are shown in table 12. After a slump in 1974, flour production rose about 2 percent in calendar 1975 to 246.7 million cwt. Flour exports in 1975 fell to their lowest level in 33 years, although shipments of products in terms of flour increased. On the basis of increased production, lower exports, and no stock adjustment, apparent per capita civilian food consumption was up about 2 percent to 107 pounds for 1975. The absence of flour stock data and the lags in data collection and reporting raise some question about per capita consumption estimates. A more important fact may be that both 1974 and 1975 are below the long term trend; therefore, the decline in wheat food consumption may not have been reversed.

After two consecutive months of increase the price of a 1 pound loaf of bread eased to 35.1 cents in December, the farm-retail spread continued to increase largely due to the widening in the baker-wholesaler spread. The farm value of ingredients declined for the fourth consecutive month.

Six food items, which are primarily wheat based, are included in the retail price index of cereal and bakery products (table 9). These include white bread, whole wheat bread, flour, cookies, layer cake, and cinnamon rolls. The price index for each of these food products dropped, reflecting the decline in raw material costs last year. However, this past summer's increase in wheat prices is now being reflected in many product lines, and fourth quarter prices generally edged up. For all of these commodities except flour, the value of farm products included accounts for only a small part of the total cost. As a result, declines in farm-based product prices are often offset by increased prices in other sectors.

White pan bread: Prices, spreads, and farm value per 1-pound loaf, 1975

Item	July		August		September		October		November		December	
	1974	1975	1974	1975	1974	1975	1974	1975	1974	1975	1974	1975
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Farm Value	7.5	6.7	7.3	7.3	8.0	7.1	8.6	7.0	9.3	6.3	8.8	5.9
Wheat	5.1	4.3	4.8	4.9	5.3	5.0	5.7	4.8	5.9	4.3	5.5	4.1
Other ¹	2.4	2.4	2.5	2.4	2.7	2.1	2.9	2.2	3.4	2.0	3.3	1.8
Farm-Retail Spread ²	27.3	28.9	27.3	27.8	26.8	27.9	27.0	28.2	26.5	29.0	27.6	29.2
Miller	0.8	0.5	1.1	0.7	0.6	0.8	1.0	0.9	0.7	0.8	1.1	0.9
Baker-wholesaler	18.0	21.5	18.3	20.5	18.3	20.7	17.8	21.1	17.2	21.9	17.9	22.3
Retail	5.9	4.1	5.6	4.1	5.4	4.0	5.7	3.9	5.8	3.8	5.7	3.7
Other ³	2.6	2.7	2.3	2.5	2.5	2.4	2.5	2.3	2.8	2.5	2.9	2.3
Retail price	34.8	35.6	34.6	35.1	34.8	35.0	35.6	35.2	35.8	35.3	36.4	35.1

¹ Includes lard, shortening, sugar, and nonfat dry milk.
² Totals may not add due to rounding. ³ Charges for transporting and handling all ingredients; processing farm ingredients other

than wheat; and costs of nonfarm ingredients such as yeast and salt.

OUTLOOK FOR 1976/77

Winter Wheat Acreage Largest Since 1949

Despite faltering prices and dry conditions in some areas, U.S. farmers increased winter wheat plantings to 57.2 million acres for 1976. This was 2 percent above last year's and the largest planted acreage since 1949.

Wheat prices are off from last year, but sorghum and soybean prices have weakened as much or more. Thus, farmers have still found wheat the best relative choice, although the expected return may not be as high as last year's. Farmers who invested heavily in new machinery during the last several years of high prices may have decided that the marginal costs of planting additional acreage were low.

Minnesota, South Dakota, Iowa, and Arkansas led the increases with 37 percent, 29 percent, 27 percent, and 27 percent, respectively, over 1975. Plantings increased or were constant in 20 States and fell in 22 States.

Based on December 1, 1975, conditions, winter wheat production is forecast at 1,496 million bushels, 9 percent below last year's record large crop. The smaller estimate in the face of increased acreage is the result of lower predicted yields and harvesting rate. Dry conditions are expected to lower the harvesting rate for winter wheat to around 87 percent compared with 92 percent in 1975 and 90 percent in 1974. Winter wheat yields are projected at 26 bushels per seeded acre or 30 bushels per harvested acre. This is a substantial decrease from last year's 32 bushels per harvested acre. In addition to poor weather, the expanded acreage will tend to hold down yields as less productive land is brought into use.

As of last December 1, much of the Great Plains area was still suffering from dryness. Since then, topsoil conditions have improved although subsoil moisture is still in short supply. Improved moisture conditions generally have not resulted in improved top growth because of unusually cold weather. However, a few warm days could improve growth conditions. Lack of adequate snow cover has caused concern over the possibilities of winterkill and wind erosion in some locations.

Increased Wind Erosion Reported

According to a recent Soil Conservation Service report¹, two and one-half times as much land in the

¹"Wind Erosion Conditions - Great Plains, Summary of Local Estimates as of December 31, 1975", based on estimates from SCS field offices in cooperation with other USDA field representatives and local authorities, USDA Soil Conservation Service.

Great Plains was damaged by wind erosion from November 1, 1975 to December 31, 1975 as during the same period last year. Cropland accounted for over 80 percent of the damaged land. Total land damage was heaviest in the Northern Plains States. Crops or cover were destroyed on almost 200 thousand additional acres that did not suffer land damage.

All States in the Great Plains reported emergency tillage to prevent land damage. The amount of land in condition to blow was about 10 million acres, more than 50 percent greater than a year earlier. Land in condition to blow was distributed fairly evenly between the Northern and Southern Plains States.

Dry fall conditions contributed to this year's wind erosion by limiting germination, thus limiting ground cover, and by contributing to poor topsoil moisture. The dry weather in combination with excessive tillage has caused a shortage of crop residue. Finally, the lack of snow cover has aggravated the problem.

Indicated Spring Wheat Acreage Climbs

According to the January 1 *Prospective Plantings* report, farmers intend to plant more Durum and other spring wheat in 1976. Total spring acreage is 20.0 million acres, up 6 percent from last year and the largest since 1953.

Durum plantings are indicated at 5.2 million acres, up 8 percent from last year, primarily because of dramatic increases in Arizona with 325,000 acres in 1976 and New Mexico with 15,000 acres. Previously any Durum in those two States was included with winter wheat. Durum acreage in States other than Arizona and New Mexico is up an average of only 1 percent.

Other spring planting intentions for the U.S. are 14.8 million acres, a 5 percent increase over 1975. The largest increases were 160,000 acres in Minnesota, 150,000 acres in Montana, and 450,000 acres in North Dakota.

With normal weather, spring yields could be around 28 bushels per harvested acre. However, spring wheat yields have been much more variable than winter wheat yields, largely because of the vagaries of weather.

Assuming that the recent 98 percent rate of harvesting spring wheat continues, projected spring production would be around 500 million bushels. Durum production could be between 125 and 150 million bushels while other spring production will account for nearly 400 million.

1976 All Wheat Crop May Fall Short of Record

The total 1976/77 wheat crop will likely fall short of 1975/76's record harvest of 2.1 billion. If conditions improve in the dry areas this winter and if the spring weather is normal, winter wheat yields may rebound enough to push production over the record. However, if dry conditions continue to plague the Great Plains, yields may decline further causing production to fall below 2.0 billion.

Production of 2.0 billion bushels plus an expected carryover of around 400 million bushels would combine for a total supply in 1976/77 of about 2.4 billion of all wheat, slightly lower than 1975/76's supply.

Fertilizer More Readily Available and Cheaper

The improved fertilizer situation should benefit 1976 wheat yields, provided moisture conditions improve. Fertilizer prices have softened, encouraging more use. Equally important is availability—farmers should be able to obtain the proper kinds of fertilizers for application at the optimal times. This contrasts with the situation last year when growers applied what they could get. Application rates should recover after 2 years below trend.

Disappearance May Decline

Domestic food use in 1976/77 is expected to remain about the same as this year's, while seed use, which is largely a function of planted acreage in the next year, is expected to decline slightly.

The recovery in cattle placements in response to favorable feeding margins could cause some recovery in wheat feeding. Depending on the extent of the recovery in livestock and the actual relationships between wheat and feed grain prices, wheat feeding in 1976/77 could be between 175 and 225 million bushels.

The 1976/77 crop year is expected to be another good one for U.S. wheat exports. World wheat stocks on July 1 are expected to be at an all-time low because consumption has exceeded production in the last several years. Continuing increases in population and growing incomes in the developing countries will cause further increases in the demand for wheat. The combination of growing demand and small stocks indicates that U.S. exports of wheat should continue at a high level as other countries must import to meet their higher consumption goals.

Some 1976 Program Provisions Announced

The 1976 national wheat allotment has been announced at 61.6 million acres. This is 8.1 million acres or 15 percent more than last year's allotment of 53.5 million acres. Again, there are no set-aside requirements. The provisions for substitution of non-conserving crops and conserving crops used for hay or pasture remain the same, i.e. substitution may be made to preserve wheat allotments and to maintain eligibility for any payments under the target price feature.

The target price for 1976 has yet to be announced, but is expected to fall between \$2.25 and \$2.30. The loan rate and the loan maturity

Percentage of wheat fields receiving fertilizer, and rate, per acre in selected States¹

Crop year	Acres receiving				Rates per acre receiving		
	Any fertilizer	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
	Percent	Percent	Percent	Percent	Pounds	Pounds	Pounds
1964/65	50	47	36	16	27	27	19
1965/66	52	48	38	15	31	20	35
1966/67	54	49	38	15	32	32	37
1967/68	58	53	43	17	35	32	39
1968/69	60	56	43	17	36	32	36
1969/70	59	56	44	17	38	34	39
1970/71	63	61	44	20	39	30	36
1971/72	58	57	41	14	40	34	36
1972/73	63	61	44	15	46	37	38
1973/74	64	63	45	17	48	38	36
1974/75	67	66	46	20	47	38	37
1975/76 ²	63	63	43	21	46	35	35

¹States included are Colorado, Idaho, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Texas, and Washington. ²Preliminary.

Source: 1976 Fertilizer Situation, Economic Research Service, U.S. Department of Agriculture.

dates have not yet been announced. Under the present program, the loan rate may be set anywhere between the minimum rate of \$1.37 per bushel and 100 percent of parity. Last year's policy

of anniversary loan maturity allowed farmers to redeem their loans at any time up to the last day of the eleventh month following the month in which the loan was made.

WHEAT BY CLASS

Hard Red Winter Stocks Up Sharply

Stocks of Hard Red Winter (HRW) totaled over 700 million bushels on January 1, nearly 150 million more than a year ago. The larger stocks are a function of this crop year's increased supplies as July-December disappearance of over 500 million bushels ran ahead of 1974/75's heavy level. Exports continued to lead the way, totaling close to 350 million bushels, around a fourth ahead of last year's pace. The heavy volume of shipments to the USSR was the main stimulus as their liftings accounted for over a third of the total. Brazil was the biggest of the Western Hemisphere importers who collectively accounted for about 30 percent of the July-December HRW exports. Domestic use appears to be holding near last year's pace as some fall off in feed use is about offset by changes in mill grind and seed use.

How do the 700 million bushels in stock on January 1 match up against estimated needs? Strong prices relative to competing feed grains should limit feeding of old crop HRW, and seed requirements have already been met. The level of mill grind will depend on the prices of HRW relative to other wheat classes and on the continuation of the recovery in domestic food use. Domestic use of HRW could total close to 100 million bushels for the January-June period, leaving roughly 600 million bushels available for export and carryover.

Outstanding export sales as of January 18 totaled 125 million bushels. This includes 28 million bushels of optional origin sales which are destined for the USSR. It is also anticipated that additional quantities of HRW will be sold to the USSR. However, additional sales of around 150 million bushels would be needed to reach the projected level of 735 million bushels for 1975/76. If the USSR does not return to the market, it would seem unlikely that we could find replacement customers and, consequently, much of this grain would become stocks. It seems probable that stocks this summer will total at least 230 million bushels and could climb to near 300 million, a 60 percent increase from the summer of 1975.

The shortage of high protein HRW is being reflected in the marketplace as 13 percent protein wheats at Kansas City have consistently commanded a 30 to 40 cent premium. After falling nearly a fourth from their seasonal highs, HRW prices have strengthened in recent weeks. The pattern for the rest of the year will hinge on two

important factors—progress of the 1976 crop and exports of old crop wheat. If the anticipated export sales do not fully materialize, it is likely that prices will weaken appreciably, possibly approaching the level that was touched at the start of 1975 harvest. Protein premiums would likely continue strong until new crop wheat becomes readily available. On the other hand, if exports remain strong and concern heightens about the 1976 HRW crop, prices could hold near current levels until new crop supplies become readily available.

Acreage seeded to HRW appears to be up about 4 percent this year. However, dry conditions in the Central and Southern Plains along with extremely cold weather this winter have raised genuine concern about crop prospects. Yields could well average below last year's level and even with a larger harvested acreage, HRW production in 1976 could fall 100 million bushels short of the 1975 harvest.

Soft Red Winter Disappearance Heavy

By January 1, well over half of this year's record supply of Soft Red Winter (SRW) had moved into disappearance channels. For the second consecutive year, SRW exports totaled around 100 million bushels, reflecting the fact that it has often been our cheapest wheat delivered dockside. Over 40 different countries were attracted to SRW, but the USSR was conspicuously absent.

Feed use of SRW slowed considerably during the latter part of the July-December period. Although some feeding of SRW may continue in the traditional feed deficit areas, any significant increase likely will have to wait until new crop supplies become readily available.

Mill grind continues heavy, reflecting the overall abundance of SRW supplies and the apparent recovery in consumption of sweet baked goods.

With July-December disappearance totaling around 200 million bushels, January 1 stocks ran slightly over 160 million bushels. This was about 50 percent larger than a year earlier.

Mill grind should continue the strong pace of the first half, but feed and seed requirements have generally been met. This implies domestic disappearance for January-June of about 70 million bushels, leaving around 90 million bushels available for export and carryover. As of January 18, outstanding sales totaled only around 35 million

bushels. But many countries should be back for more. Should these sales be large enough to push total exports for the year up to the USDA's estimate of 175 million bushels, there will be little buildup in stocks.

SRW has generally been priced below most other wheats this year (table 7). If historical patterns persist, the imminence of another large SRW crop and adequate old crop supplies could continue the discounts of SRW relative to other classes. This should encourage exports and minimize the potential for building stocks.

The acreage seeded to SRW for harvest in 1976 could well be the largest on record. Good planting weather last fall, a favorable price outlook, and an increase in double cropping of wheat and soybeans all contributed to the acreage increase. As of mid-January conditions in the major eastern Soft Wheat States continued mostly good, pointing to prospects of another bumper SRW crop, possibly exceeding last year's record harvest.

Hard Red Spring Exports Up; But More Must Move

Stocks of Hard Red Spring (HRS) on January 1 totaled over 200 million bushels, up slightly from a year ago. Total disappearance this July-December ran well ahead of last year's 140-150 million bushels. Exports led the way totalling nearly 100 million bushels, nearly a third ahead of last year's pace. The EC-9 (European Community nine member nations) and Japan continue to be our major customers, although the Philippines and Venezuela have made large, early purchases.

The short supply of high protein HRW's this year suggests that 1975/76 could be another strong mill grind year for HRS's, possibly exceeding 1974/75. However, the disappearance from HRS supplies during July-December which can be attributed to domestic mill grind actually ran below last year's level. This would seem to indicate that the projections of domestic mill grind of HRS have been overly optimistic or that supplies or stocks of HRS are understated.

Total domestic requirements for the second half of the crop year should total around 90 million bushels. Subtracting domestic needs from January 1 stocks leaves 140-150 million bushels available for export or carryover. January-June exports have been estimated at around 60 million bushels. As of January 18, outstanding sales for the period totaled only 25 million bushels. The EC and Japan still have outstanding spring wheat requirements. How much of these sales we make will depend on competition from Canada and on prices of our HRS protein wheat compared to alternative wheats both here and abroad. The prospects for additional sales suggest that any buildup in HRS stocks this year could be small.

Prices for HRS wheats have been strong this year, but the premiums on protein wheats have been nothing short of spectacular. Thirteen percent proteins have been averaging 30 to 40 cents above Dark Northern Spring (DNS) ordinaries in Minneapolis, while 15 percent proteins and above have often been as much as a dollar more than ordinaries. The level of HRS prices for the rest of the year will be closely tied to prices of the other wheat classes. If export prospects dim, prices will ease from current levels. However, any additional deterioration in the winter wheat crop or a sharp pickup in hard wheat export demand could limit the decline. Protein premiums have backed off in recent weeks, and it seems likely that this trend will continue. The one development that might reverse this trend would be a large sale of higher protein winter or spring wheat to the USSR.

Durum Stocks Up Sharply; Prices Weaken

January 1 Durum stocks of 86 million bushels vividly reflected the record Durum crop this year and the failure of demand to grow correspondingly. Durum stocks were 20 percent larger this January 1 with most of the increase on-farm.

Mill grind of Durum totaled around 17 million bushels during July-December, over 5 percent ahead of last year's pace. The recent pickup in mill grind and some easing in semolina prices may herald an increase in domestic food use of Durum this year. Exports during July-December at around 40 million bushels were almost identical to first half movement during the last crop year. The EC and Algeria continued to be our largest customers. However, Poland and East Germany have accounted for nearly 10 percent of the shipments to date.

Mill grind should continue heavy during the next six months if Durum and semolina prices continue to improve their competitive position relative to other wheat classes and flours. Durum acreage (January 1 planting intentions) was estimated at 5.2 million acres, 8 percent above a year ago. This would require around 7 million bushels of seed. Combining these two domestic disappearance items would leave around 65 million bushels available for export and carryover. The outstanding sales report of January 18 showed 10 million bushels shipped since December 31 and 17 million bushels outstanding, including 10 million optional origin sales. If exports reach or exceed 60 million bushels, total disappearance for the year would climb to 100 million. This would still fall short of the record 1975 harvest and would leave wheat stocks this summer of nearly double last year's 21 million bushels.

Prices of No. 1 Hard Amber Durum at Minneapolis have weakened since their September

highs of over \$6 per bushel. In January prices had slipped to the mid-\$4 range and the price spread between Durum and the hard wheat had narrowed. Unless demand surges unexpectedly, Durum prices may continue to weaken relative to other wheats in the months ahead.

White Wheat Exports Heavy

White wheat stocks as of January 1 totaled around 175 million bushels, about a third above last year's level. Around 140 million bushels were located in the Pacific Northwest, 15-20 million in the East and the remainder scattered throughout the West. Total disappearance of White wheat during July-December at around 140 million bushels was not too different from a year ago. Export demand surged during the second quarter bringing the total for the July-December period to around 105 million bushels. India was the largest single customer accounting for around a third of the total. Shipments to Japan and Korea accounted for another third. All of this was off the West Coast. Around 12 million bushels of Eastern White wheat had been shipped by December 31. Total domestic use for the period of around 35 million bushels was not too different from historical levels. However, it does appear that mill grind in the Pacific Northwest may be lagging behind last year's level.

The pace of disappearance is likely to slacken a bit during January-June. Domestic use should absorb 30 million bushels of the January 1 stocks. This leaves about 150 million bushels for export or carryover. As of January 18, outstanding sales accounted for about half of this total. India alone accounts for three-fourths of the total outstanding sales. Since substantial quantities of PL-480 wheat are yet to be programmed and since at least some of the recipients are traditional White wheat customers, sales should expand. If export sales rise to the projected level of 220 million bushels, stocks of wheat this summer will increase only marginally from the 1975 level of 30 million bushels.

Reflecting the heavy export movement late in 1975, White wheat prices managed to hold reasonably well compared with most other classes. The future path will depend on what happens to overall export prospects and on 1976 crop developments.

This past fall, farmers seeded about 4 percent less winter White wheat acreage than they did in 1975. Spring acreage in White wheat is also expected to be down, although the extent will depend on the amount of the winterkill and how much reseeded is required. Growing conditions have been good in the major White wheat producing areas, and the 1976 winter White wheat crop should approach last year's 250 million bushels.

WORLD WHEAT SITUATION¹ OUTLOOK FOR 1975/76

World Wheat Level Down

World wheat production is now estimated at 340 million tons, down 3 percent from the 1974/75 output and 35 million tons less than the trend as shown below. Another sharp cut in the crop of the Soviet Union, the world's largest wheat producer, was responsible for much of the decline. World production, excluding the USSR, is estimated at 275 million tons, up 3 percent over 1974/75 and above trend for the fourth consecutive year. The sharp reduction in the USSR crop (down 19 million tons) and the decrease in the European harvests (down 13 million tons) were largely offset by bumper crops in Canada, Argentina, India, Turkey, Iran, Australia and the United States.

USSR Grain Crop Estimate Reduced to 140 Million tons; Wheat at 65 Million

On January 31 the USSR announced that its 1975 total grain crop was 140 million tons. This is approximately 75 million below the original level planned for the 1975 crop. The composition of the harvest has not yet been announced, but the wheat

World wheat production deviations from 1960-75 linear trend

Year beginning July 1	World Total		
	Actual	Trend	Deviation
	<i>Million metric tons</i>		
Average			
1960-62	241	240	1
1969-71	323	326	-3
1972/73	339	346	-7
1973/74	369	355	14
1974/75	350	365	-15
1975/76	340	374	-35
	World total excluding the USSR		
Average			
1960-62	174	175	-1
1969-71	230	237	-7
1972/73	254	251	3
1973/74	259	258	1
1974/75	267	265	2
1975/76	275	271	3

¹Based on FAS, World Grain Situation: Outlook for 1975/76, FG-16-75, Dec. 22, and ERS, World Agricultural Situation, WAS-9, Dec. 1975. Data in metric units.

crop is thought to have reached about 65 million tons. The previous year's wheat crop was 83.8 million tons.

The low outturn of total grains suggests a significant downward adjustment in total USSR grain usage in 1975/76. The Soviets have increased their rate of livestock slaughter, particularly of hogs and poultry, to cope with the limited availability of grain. It is estimated that a 20 to 25 percent reduction in grain fed to livestock may be necessary.

Limited by import handling capacity and unloading delays that have arisen, grain imports probably will not go significantly beyond 27 to 30 million tons. U.S. sales to the USSR as of January 11 stood at around 13.5 million tons, including 4.5 million tons of wheat.

The Soviets reported seedings of 35 million hectares of winter grains last fall although the amount of moisture in the soil over most of the winter grain regions was far below average. This shortage of soil moisture apparently interfered with the germination and development of the grain, and at least some of it went into dormancy in poorer than normal condition. The relatively poor weather conditions for winter grain last fall probably preclude a record yield of winter grains in 1976.

A series of storms in early January substantially increased snow cover, which was extremely sparse at the end of December. As of January 7, only the generally milder areas of the western and southern portions of the USSR lacked snow cover. Temperatures have been rather moderate and are not likely to have caused much crop damage, but icy conditions in places have caused some concern about suffocation.

Southern Hemisphere Wheat Prospects Improve

Australia's 1975/76 wheat harvest is now in and the crop is estimated at 11.7 million tons, up 4 percent over 1974/75. In spite of a very late, dry start, Australia's wheat crop has responded to midseason rainfall and near optimum growing conditions enabling a recovery to a level of production that was not expected. The Australian Wheat Board assesses wheat export availability from the crop at 9.0 million tons. Sales made to the USSR, China, India, and Egypt plus firm reservations for regular markets such as Japan leave only limited quantities for disposal in other markets.

Argentina's wheat area for 1975/76 was estimated at 5.1 million hectares, up about 30 percent over last year's crop and a fourth above the 1970-75 average. Production is estimated at 8 million tons, up 40 percent over 1974/75. Earlier estimates of the 1975/76 wheat crop were higher than the 8 million tons currently anticipated, but a dry spell

that stretched through November and into mid-December reduced yields, particularly in the southwest. Argentina's wheat exports for 1975/76 are estimated at 4 million tons, up about 60 percent. Argentina may put more wheat in world markets than it has in a decade.

Canada's Wheat Crop Up Sharply; Quality Improved

Canada's wheat production for 1975 is estimated at 17 million tons, up 28 percent from 1974/75's poor harvest. This includes a record Durum harvest of 2.5 million tons, nearly 60 percent higher than the 1974 crop. The quality of this year's wheat crop is improved from last year's weather-reduced level, but wet weather at harvest this year left quality somewhat below average. About 55 percent of the wheat to be delivered was expected to grade No. 1 and 2 CWRS (Canadian Western Red Spring) compared to last year's 38 percent. With a larger supply, Canadian wheat exports for 1975/76 are estimated at 15 to 20 percent above last year's 11 million tons. The Canadian Wheat Board has made grain sales to the USSR totaling 4.0 million tons for 1975.

India's 1975 Wheat Crop Up Sharply; 1976 Crop Early Start Good

India's 1975 wheat crop, the first major harvest of the season, is estimated at around 24 million tons, up 17 percent from the relatively small crop of 1974. The good crop was attributed mainly to favorable weather along with improved irrigation and expanded use of high yielding varieties. With the good rice crop, it eases somewhat the extremely tight food grain situation India has been facing. But demand pressures continue to swell, and India is expected to continue relatively large imports of food grains. There also appears to be a concentrated effort to rebuild depleted food grains stocks. The winter showers which usually occur in December and January were less than normal this season. Somewhat more rainfall will be needed during February to insure optimum yields. Commitment of U.S. wheat already totals about 4.3 million tons. Widespread rains at planting time got the 1976 wheat crop off to a good start.

West and East European Wheat Crops Down Sharply

The Western Europe 1975 wheat harvest is estimated at 48 million tons, down 15 percent from 1974. This includes the Economic Community's (EC) wheat crop of 38 million tons, which was down 16 percent. Excess rain at planting time and drought later in the season, especially in the north and northwest regions of Europe, were largely

responsible for the decline in production. This will probably mean an increase in gross imports for Western Europe from last year's 11 million tons.

The EC as a whole should continue as a relatively small net exporter of wheat. Durum and hard wheat make up most of the imports, with soft wheat accounting for virtually all the exports.

Eastern Europe's 1975 wheat harvest is estimated at 29 million tons, down 14 percent from 1974. This has spurred demand for U.S. grain since the USSR cannot meet their needs this year. As of mid-January, Poland, the German Democratic Republic, and Romania had contracted for 5 million tons of grain, including 2.2 million tons of wheat, for delivery during fiscal 1976. Eastern Europe's total wheat imports for 1975/76 are estimated at 4.6 million tons.

World Trade May Be Record, But Consumption Down

World trade in wheat for 1975/76 (July-June) is projected at 76 million tons, about 10 percent larger than in 1974/75. The increase is largely due to USSR purchases.

It is estimated that world consumption of wheat for 1975/76 will total 345 million tons, down 2 percent from 1974/75 due to a decline in wheat for feed use. In major countries, the estimated feed use of wheat for 1975/76 is around 43 million tons, down 8 percent from 1974/75.

Estimated wheat used for feed, at selected countries
1969/70-1975/76

Year	Western Europe	U.S.	U.S.S.R.	Canada	Total
	Million tons	Million tons	Million tons	Million tons	Million tons
Average					
1969/70-1971/72	13.9	6.0	36.3	2.2	58.4
1972/73	16.4	5.2	42.0	2.1	65.7
1973/74	12.7	3.8	32.0	1.9	50.4
1974/75 ¹	13.8	2.0	29.0	2.0	46.8
1975/76 ²	12.3	2.0	27.0	1.9	43.2

¹ Preliminary. ² Projected.

World Wheat Prices

During the first quarter of 1975, U.S. DNS 14 percent and HRW 13.5 percent CIF Rotterdam averaged \$5.20 and \$4.90 a bushel, respectively. Prices averaged \$5.07 and \$4.83 a bushel for the fourth quarter. The highest average price during 1975 for DNS 14 percent was \$5.55 a bushel in January and September, and in the same months the high level for HRW 13.5 percent was \$5.30 a bushel. Throughout 1975 CWRS 13.5 percent has exceeded U.S. prices—the average spread in the first quarter of 1975 was \$0.15 and \$0.45 per bushel, respectively, for DNS 14 percent and HRW 13.5 percent. In November 1975 the differentials between these wheats were \$1.26 and \$1.46, respectively.

Wheat prices at Rotterdam, the Netherlands, c.i.f.

Period	DNS 14%	HRW 13.5%	Canada CWSR 13.5%
	Dollars per bushel	Dollars per bushel	Dollars per bushel
1975			
January	5.55	5.30	5.67
February	5.24	4.88	5.41
March	4.80	4.53	4.96
April	4.84	4.54	5.24
May	4.58	3.98	5.08
June	4.51	4.00	5.26
July	4.87	4.70	NQ
August	5.28	5.13	5.83
September	5.55	5.30	6.20
October	5.28	5.14	5.97
November	4.98	4.78	6.24
December	4.94	4.56	NQ
9	5.10	4.75	NQ
16	4.84	4.50	NQ
19	4.84	4.48	NQ
23	4.98	4.49	NQ
1976			
January			
5	4.89	4.41	NQ
9	5.02	4.44	NQ
19	5.08	4.75	NQ
26	5.03	4.68	NQ

NQ - Not quoted:

Source: Foreign Agriculture, FAS

RYE HIGHLIGHTS

The 1975 rye crop of 17.9 million bushels was down 7 percent from 1974 and 32 percent below 1973's crop. Harvested acreage was the lowest on record at 814,000 acres. Only 26 percent of the planted acreage was harvested for grain compared with 28 percent in 1974. Yields recovered slightly from 1974's low 21.5 bushels per harvested acre, but were still well below normal because of poor moisture conditions at seeding time in the Northern Great Plains. Dry weather during the spring and summer also held yields down.

Total supply for this crop year continued to decline and was down 20 percent from 1974/75. In the first half of 1975/76 exports and use for food, seed, and feed declined; only industrial use increased. Total first half usage was down 21 percent from 1974/75 and 62 percent from 1973/74. Despite declines in usage, carryover is expected to fall still further because of the small production.

Rye has continued to be in an unfavorable price position relative to soft wheats. Soft wheat prices have weakened more than rye prices, and bakers have not found it worthwhile to shift to using more rye in their blends. There is a strong relationship between rye flour grind and the difference between

Rye: Supply and distribution

Item	July-December	
	1974	1975
	<i>Million bushels</i>	<i>Million bushels</i>
July 1 stock	11.0	5.8
Production	19.3	17.9
Imports	(1)	.4
Total supply	30.3	24.1
Exports	3.9	1.0
Food	2.9	2.2
Seed	4.1	3.9
Industrial6	1.0
Feed	6.8	6.3
Total disappearance	18.3	14.4
January 1 stocks	12.0	9.7

¹ Imports negligible.

rye and wheat prices. Figure 1 shows the relationship between monthly rye flour grind and the monthly-average price spread between Chicago

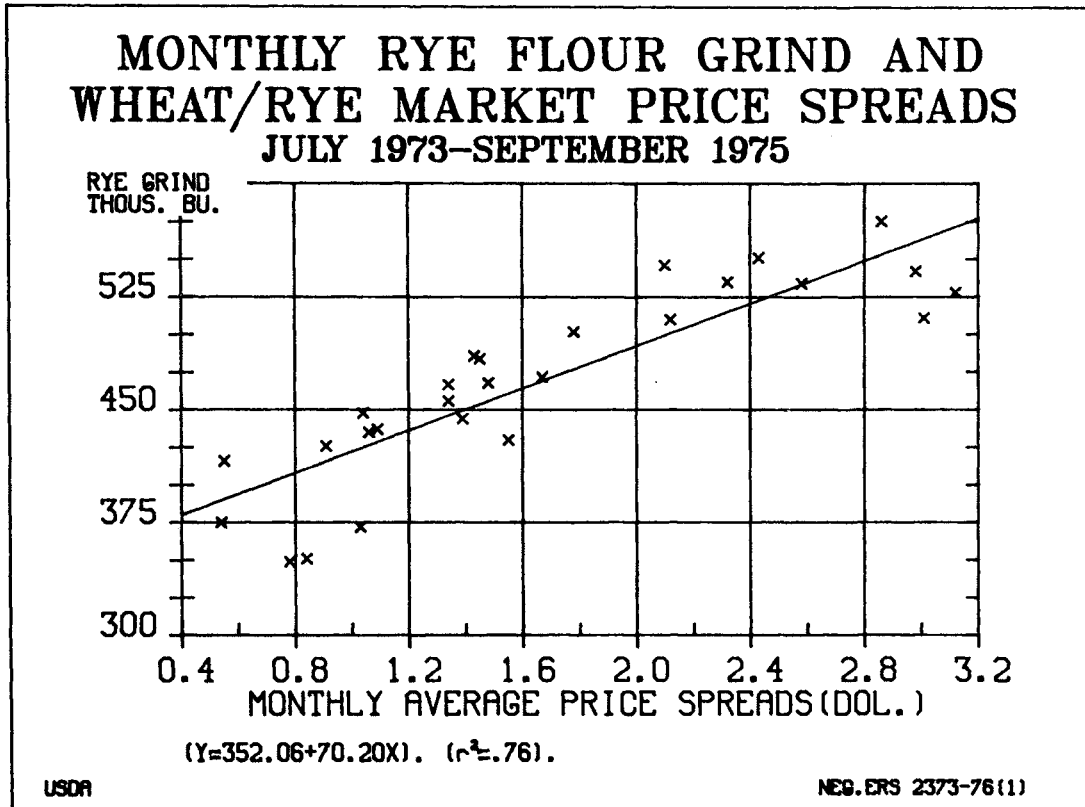


Figure 1

No. 2 Soft Wheat and Minneapolis No. 2 Rye. Monthly grind was below a year earlier during each of the last twelve months. For the first eleven months of calendar 1975, monthly rye grind averaged more than 100,000 bushels below the 1974 average.

Fall seedings for the 1976 crop totaled only 3,031,000 acres, down 4 percent from 1974/75 and the smallest on record. Last year's three leading rye acreage States showed substantial declines: Georgia, the leader, was down 15 percent to 410,000 acres; Texas was down 28 percent to 180,000 acres; and Oklahoma was down 14 percent to 180,000 acres. These declines were partially offset by Minnesota's 30 percent gain to 130,000 acres and South

Dakota's 36 percent gain to 190,000 acres. Wisconsin and Colorado also had large percentage changes, but in absolute terms the changes were minor.

The rye crop has also been affected by the lack of moisture in the Great Plains. Growth was limited although rainfall and snow in the late fall aided germination. In most other areas, the crop was in good condition as of December 1, 1975. Increases in wheat acreage tend to crowd rye out or into less fertile land, which has an adverse affect on rye yields. However, if weather conditions continue favorable in the major States, rye yields should increase over the abnormally low yields of the last 2 years.

COSTS OF PRODUCING WHEAT IN 1974¹

In early 1975 a national survey was conducted by the U.S. Department of Agriculture to determine the 1974 costs of producing selected crops including wheat. A sample of farm producers was interviewed in the production regions designated on the map in Figure 1. Information collected from farmers included quantities and costs of purchased inputs, detailed cropping practices and specifications of machinery used, quantity of labor hired, wages paid, share rent and cash rent payments, other general farm expenses, and the value of cropland for agricultural purposes.

Estimates of four major cost components—direct general overhead, allocation to management, and allocations to land—are presented in Table 1. Direct costs include labor, power and machinery, seed, fertilizer and chemicals, custom services, irrigation, and interest on operating capital. Overhead includes a proportionate allocation to wheat of personal property taxes, electricity, sales taxes, insurance and farm auto—costs which the producer must pay but which are not directly related to the production of a specific crop or enterprise. An allocation to management was computed at the rate of 7 percent of gross sales and allocated in proportion to each crop's part in total production. Allocations for the land input were computed by six alternative methods: (1) owned land—assumes owner operator basis with land valued at current prices for agricultural purposes; (2) owned land—assumes owner operator basis with land valued at an average acquisition price; (3) net share rent; (4) cash rent; (5) composite basis reflecting actual combinations of cash rent, share rent, and owner operator arrangements with owned land valued at current prices; and (6) composite as in (5) above, except owned land was valued at average acquisition prices.

The allocation for owned land was computed by multiplying the Federal Land Bank interest rate times the land value (current or acquisition).

Average costs per acre and per bushel are found in Table 1. Per bushel costs were calculated first on actual 1974 yields and secondly on trend yields. Adverse weather in most production areas in 1974 resulted in unusually low wheat yields, causing costs per bushel to be higher than normal.

The average cost of producing wheat in 1974 ranged from \$71 to \$95 per acre depending on the allocation used for the land input. Costs per bushel ranged from \$2.64 to \$3.50 using 1974 yields and from \$2.17 to \$2.88 with trend yields.

When land was allocated on a "composite basis" and credit was given for wheat grazing, the range

in total costs for winter wheat and for Durum was \$80 to \$90 per acre and for other spring wheat \$70 to \$80 per acre.

Direct costs came to \$1.57 per bushel, with seed and fertilizer making up one-third of this cost. When general overhead costs and management were added, the cost per bushel rose to slightly over \$2.00. If the return to land was computed at *current market value* times the Federal Land Bank interest rate, and added to costs, the total came to \$3.52 per bushel. If the return to land was based on *average acquisition value* times the same interest rate, total cost came to \$2.64 per bushel.

The average value from grazing wheat in 1974 was calculated at \$2.13 per acre. If this amount were subtracted from total production costs, the net cost of producing the primary product—wheat grain—would be \$2.58 to \$3.42 per bushel at 1974 yields, and \$2.11 to \$2.82 per bushel at trend yields.

Wheat Classes

Table 1 shows that the average cost per acre, excluding land, for Durum was \$59 while for other spring wheat the cost was about \$53. Winter wheat costs fell midway between. Labor costs were somewhat higher for winter wheat but power and equipment costs, as well as material costs, were lower than for Durum and other spring. Fuel costs were higher for the spring wheats, and the seed costs (especially for Durum) were considerably higher. Custom service charges were larger for winter wheat, very likely reflecting the fact that custom combining is prevalent in winter wheat areas outside of the Pacific Northwest. Irrigation costs were only significant for winter wheat, averaging over \$2 per acre. Charges for overhead and management were heaviest for Durum and winter wheat, totaling \$13 per acre, and lowest for other spring at \$11.

Strong Durum prices the two preceding years were probably reflected in the higher valuation of Durum wheat land relative to other spring. The land value for winter wheat reflected its potential value as wheat land but also the potential alternative returns from other crops. For instance, winter wheat grown in the Corn Belt and the Delta States

¹Contributed by Pat Weisgerber. Based primarily on *Costs of Producing Selected Crops in the United States—1974*, January, 1976. Prepared by the Economic Research Service, USDA, for the Committee on Agriculture and Forestry, U.S. Senate.

had a higher land allocation than that grown in areas where there are few alternatives other than wheat. On average, winter wheat land was valued 25 to 30 percent higher.

Cost of production differences among the major wheat classes were more extreme when computed on a per bushel basis. Yields per harvested acre were over 35 percent below projected trend yields for Durum, 20 percent for other spring wheat and 13 percent for winter wheat. Consequently, when costs were converted to a bushel basis using actual yields, costs for both Durum and other spring wheats were much higher than for winter wheat. Costs, excluding land, were highest for Durum at \$3 per bushel with other spring next at \$2.42 and winter wheat, at \$1.89, the lowest. When the two composite land allocations were added, Durum production costs ranged from \$4.15 to \$4.73 per bushel. Comparable spring wheat costs were \$3.27 to \$3.76 per bushel, while winter wheat ranged from \$2.80 to \$3.17.

A more appropriate comparison of costs might be to use "normal" yields for each wheat category. Using 1950-73 yield trends, the indicated 1974 yield per acre is 33.9 for winter wheat, 31.2 for Durum, and 28.2 for other spring wheat. If the same (1974) costs per acre were associated with these higher trend yields, per bushel costs would have been considerably lower. For winter wheat per bushel costs would have ranged from \$2.44 to \$2.76, for Durum from \$2.62 to \$2.98, and for other spring wheat from \$2.53 to \$2.91 per bushel. Allowing credit for grazing would slightly reduce costs for winter wheat and other spring wheat.

Estimates for 1975 and 1976

Variable costs for all wheat were estimated for 1975 (preliminary) and projected for 1976. The 1975 variable costs were estimated to be more than a fourth above 1974 costs; 1976 costs are projected at about one-third above 1974.

For the 1974 winter wheat crop, growers were able to purchase their fertilizer in the summer and fall of 1973, before significant price rises had occurred. Also, the fall operations on winter wheat fields in 1973 were carried out before the surge in fuel prices had come about. As a result, the increase in production costs from the 1974 to 1975 winter wheat crop was substantially greater than the increase from 1975 to 1976.

Subregional Comparisons

The wheat producing areas surveyed within the United States were divided into about 25 subdivisions. Generally, costs were lowest in the specialized wheat areas like the Pacific Northwest and the Western Plains where seed and fertilizer applications tended to be lower. A notable exception was in Western Texas where drought caused very low yields and large scale abandonment of wheat acreage in 1974.

The subregional comparisons which were made are found in Committee Print No. 63-092, Senate Committee on Agriculture and Forestry, U.S. Government Printing Office, Dec. 1975. For a free copy write to: U.S. Senate Agriculture & Forestry Committee, 322 Russell Senate Office Bldg., Washington, D.C. 20510.

Table 1.--Production costs per acre harvested and per bushel, survey yield and trend yield, by cost item, survey regions, 1974

Item	Winter wheat			Other spring wheat			Durum			All wheat		
	Cost per acre	Cost per bushel using survey yields	Cost per bushel at trend yield 1/	Cost per acre	Cost per bushel using survey yields	Cost per bushel at trend yield 1/	Cost per acre	Cost per bushel using survey yields	Cost per bushel at trend yield 1/	Cost per acre	Cost per bushel using survey yields	Cost per bushel at trend yield 1/
Labor	\$5.15	\$0.17	\$0.15	\$4.40	\$0.20	\$0.16	\$4.91	\$0.25	\$0.16	\$4.95	\$0.18	\$0.15
Power and equipment	14.56	.49	.46	16.11	.74	.57	18.69	.95	.60	15.20	.55	.64
Fuel and lubricants	4.40	.15	.13	5.13	.23	.18	6.03	.31	.19	4.68	.17	.14
Repairs	2.92	.10	.09	3.26	.15	.12	3.61	.18	.12	3.05	.11	.09
Reserve for replacement	4.27	.14	.13	4.71	.21	.17	5.58	.28	.18	4.46	.77	.14
Interest and rental	2.96	.10	.09	3.01	.14	.1	3.46	.18	.11	3.00	.11	.09
Materials	14.87	.50	.44	16.36	.75	.58	18.66	.95	.60	15.47	.57	.47
Seed	6.04	.20	.18	7.94	.36	.28	12.17	.62	.38	6.89	.25	.21
Fertilizer and lime	8.05	.27	.24	7.19	.33	.25	4.94	.25	.16	7.62	.28	.23
Herbicides	.43	.01	.01	1.04	.05	.04	1.15	.06	.04	.33	.02	.02
Insecticides and fungicides	.26	.01	.01	.18	.01	.01	.40	.02	.01	.25	.01	.01
Other materials	.09	0	0	.02	0	0	0	0	0	.07	0	0
Custom services	4.49	.15	.13	2.31	.10	.08	2.23	.11	.07	3.76	.14	.11
Irrigation 2/	2.16	.07	.06	.81	.04	.03	0	0	0	1.69	.06	.05
Interest on operating capital	1.67	.06	.03	1.43	.07	.05	1.53	.08	.05	1.60	.06	.05
Total direct costs	42.89	1.45	1.29	41.42	1.90	1.47	46.01	2.34	1.47	42.72	1.57	1.29
Overhead	5.63	.19	.17	5.21	.24	.18	5.51	.28	.18	5.52	.20	.17
Management	7.40	.25	.22	6.20	.28	.22	7.49	.38	.24	7.11	.26	.22
Total excluding land	55.92	1.89	1.65	52.83	2.42	1.87	59.01	3.00	1.89	55.35	2.03	1.68
Alternative land allocations:												
Ownership basis:												
At current land value 3/	43.00	1.46	1.27	31.94	1.46	1.13	32.78	1.67	1.05	39.64	1.47	1.20
At average acquisition value 4/	17.83	.60	.53	12.71	.58	.45	12.53	.64	.40	16.24	.60	.49
Share rent basis 5/	35.87	1.22	1.06	29.13	1.33	1.03	36.41	1.85	1.16	34.24	1.27	1.04
Cash rent basis 6/	28.55	.97	.84	21.44	.98	.76	27.00	1.37	.87	26.70	.99	.81
Composite basis:												
At current land value 7/	37.75	1.28	1.11	29.29	1.34	1.04	33.94	1.73	1.09	35.43	1.31	1.07
At average acquisition value 8/	26.80	.91	.79	18.64	.85	.66	22.58	1.15	.72	24.53	.90	.74
Value of grazing 9/	2.46	.08	.07	1.73	.08	.06	0	0	0	2.13	.08	.06

1/ Cost per bushel based on a trend yield of 33.9 bushels per acre for winter wheat, 28.2 bushels for other spring, 31.2 bushels for durum, and 33.0 bushels per acre for all wheat. 2/ Includes total costs for power, purchased water, repairs, reserve for replacement and interest on investment in irrigation facilities. 3/ Based on estimated current agricultural value of cropland multiplied by current rates of interest on Federal land bank mortgage loans. 4/ Based on estimated average value of cropland at time of acquisition by present operators multiplied by current rates of interest on Federal land mortgage loans. 5/ Net share rent is the landlord's share of crop receipts minus his share of the crop expenses. If the operator did not share rent, prevailing share rent terms in the region were applied. 6/ Based on average cash rent payments per acre of cropland. If the operator did not cash rent, prevailing average cash rental rates in the region were applied. 7/ Based on prevailing tenure arrangements on each farm, reflecting actual combinations of cash rent, net share rent and owner-operator land allocations. Current values of owned cropland are used in this method. 8/ The details in footnote (7) above apply, with the exception that for owned land, the average value of cropland at time of acquisition is used. 9/ The value of a byproduct is commonly subtracted from the total cost of producing both the primary product and byproduct in order to estimate the cost of producing the primary crop. This method equates the cost of producing a byproduct with its value. In the present case, wheat grain is the primary product while the grazing of wheat is the byproduct.

PRODUCTION REGIONS FOR CROP COST ANALYSIS

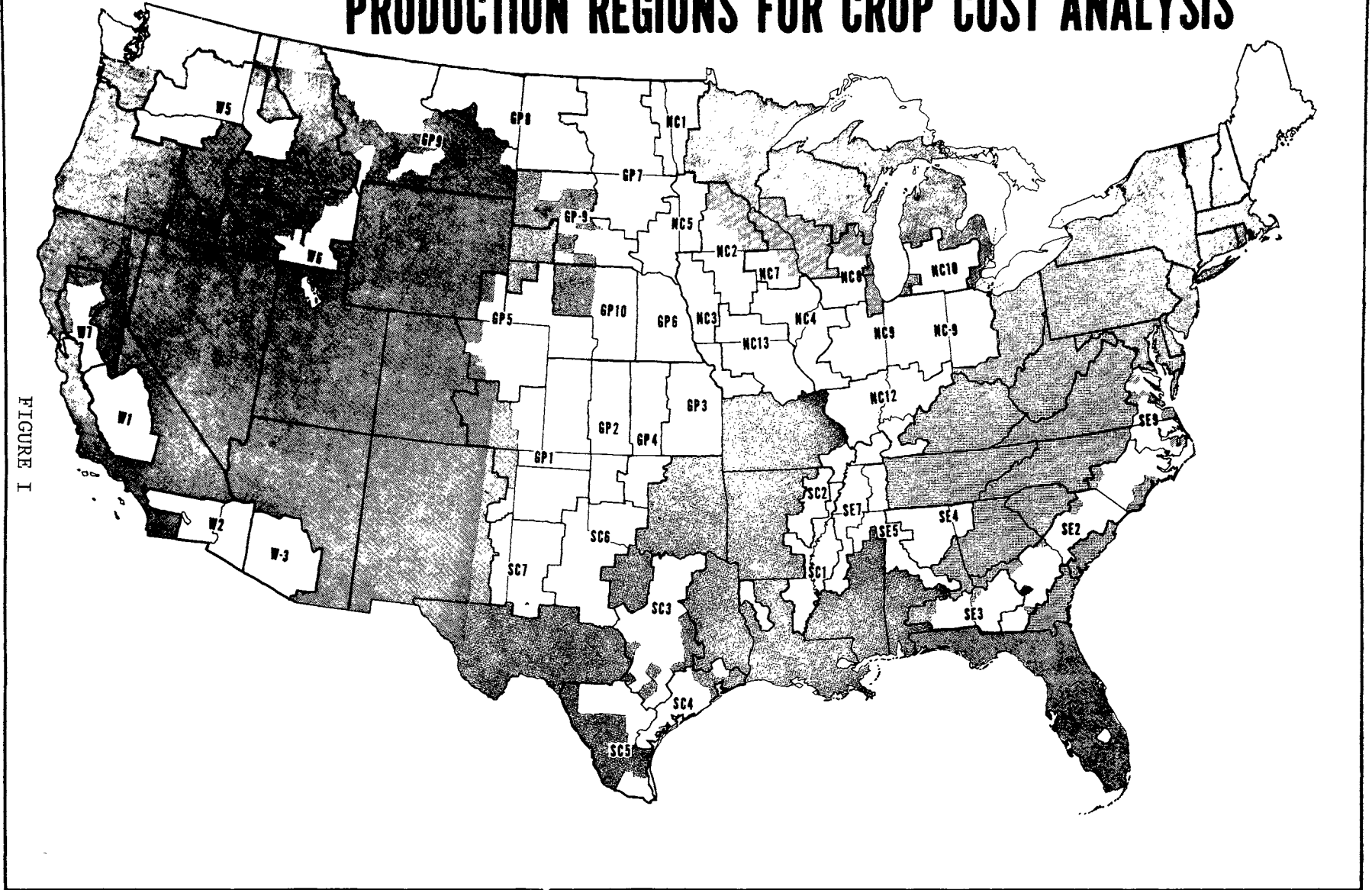


FIGURE I

AN ANALYSIS OF PRICES OF HIGH PROTEIN WHEAT

by

Mary E. Ryan and Malcolm D. Bale¹

ABSTRACT: Protein premiums for high protein wheat narrowed during 1972/74, a period of extraordinary export demand for U.S. wheat. This study investigates that relationship. The results suggest that an increase in Hard Red Winter (HRW) wheat exports is related to decreases in protein premiums. An increase in Hard Red Spring (HRS) wheat exports is related to a rise in spring wheat prices relative to winter wheat prices. In addition to exports, supplies and the protein content of the wheat crop are associated with some changes in protein premiums.

KEYWORDS: Wheat, Hard Red Winter, Hard Red Spring, White Wheat, protein premiums, price analysis, export demand, wheat supplies.

High protein wheats historically have been relatively scarce, commanding a higher price than lower protein wheats. This price differential is commonly called a "protein premium". The percentage of protein in wheat is one factor associated with flour quality for bread baking. In general, bread is made from flour with high protein content. The five major classes of wheat in the United States are listed below in order of their protein content (2, 4, 11, and 10).²

Class	Major use	Approximate protein content
Durum	Pastas	over 12%
Hard Red Spring . .	Bread	11-17%
Hard Red Winter . .	Bread	8-15%
Soft Red Winter . .	Other bakery products	under 12%
White	" "	under 11%

The amount of the price premium for protein varies with changes in supplies, demand, and the protein content of the major classes of wheat. At times during 1972/73, 1973/74, and 1974/75 little or no premium

was paid for protein and in some instances prices of lower protein classes (Soft Red Winter and White) exceeded prices of higher protein classes (HRW and HRS). This was a period of extraordinary export demand for U.S. wheat, led by huge purchases of lower protein HRW wheat by the Soviet Union. This research examines the relationships between foreign demand for U.S. wheat and domestic prices of wheats of various protein content. The study identifies and measures factors associated with variations in relative prices paid in the Pacific Northwest for wheats of various protein content.³

Previous research on protein premiums centered on supply factors. Hyslop found a strong relationship between protein premiums with respect to average protein content of each year's crop. Increases in protein content were associated with decreases in protein premiums (6). Two studies of demand for U.S. wheat by class indicated a high price elasticity of demand for HRW and HRS wheats, suggesting that buyers of high protein wheat are quite responsive to price (3, 12).

Other supply and demand studies have treated wheat as a homogeneous commodity (1, 5, 7, 8). In these studies total quantities and average prices for all wheat classes were used to estimate responses of supply and demand to price changes.

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²Numbers in parenthesis refer to references listed at the end of this article.

³This article focuses on the Pacific Northwest (PNW) because the PNW is the principal outlet for Montana wheat, upon which the study was based (9). But since wheat prices in all U.S. markets are highly correlated, the analysis has relevance for other markets (see (9), table 4).

The Economic Model

For the purpose of exposition, wheat is divided into two categories—high protein (HPW) and relatively low protein (LPW). The main hypothesis tested is that there is a negative relationship between U.S. exports of lower protein wheat and protein premiums. In terms of the market conditions prevailing during the past 3 seasons, the hypothesis can be restated as follows: The surge in export demand for U.S. wheat was for relatively low protein wheat which reduced protein premiums, and caused the general price level to rise. Figure 1 illustrates this. The supply and demand schedules on the left represent the market for HPW where:

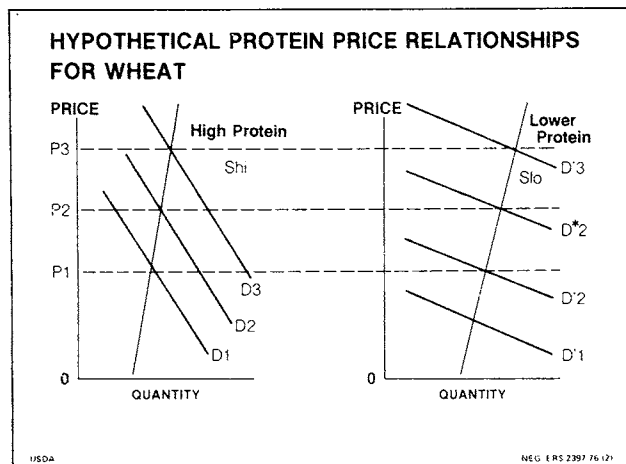


Figure 1

- D1 = Domestic demand for high protein wheat;
- D2 = Domestic plus foreign demand for high protein wheat;
- D3 = An increased total demand for high protein wheat;
- Shi = U.S. supply of high protein wheat.

The right-side illustrates the market for lower protein wheat (LPW) where:

- D'1 = Domestic demand for lower protein wheat;
- D'2 = Domestic plus foreign demand for lower protein wheat;
- D*2 and D'3 = An increased total demand for lower protein wheat;
- S1o = U.S. supply for lower protein wheat.

Supply is shown as being highly inelastic in any one year, after the crop is established.

Usually a premium, $OP_2 - OP_1$, is paid for high protein wheat. During the period under study, it is hypothesized that the demand for lower protein wheat moved

up to D^*2 reaching a temporary equilibrium price of P_2 in both markets. Thus, the protein premium disappeared. Then, the low protein wheat demand continued to shift further, to $D'3$, pulling the demand schedule of high protein wheat, D_3 , with it, until a final equilibrium price of P_3 in both markets was achieved. It is also possible that a situation could arise where the price of lower protein wheat exceeds that of high protein wheat because for some uses of wheat flour too much protein is undesirable.

The Statistical Model

To test the hypothesis the following general model was specified:

- (1) $\Phi_i/P_{i0} = f(X_{hi}, X_{lo}, S_{hi}, S_{lo}, P_{\Phi_i}, P_{P_{i0}})$ where
 - Φ_i = price of high protein wheat
 - P_{i0} = price of low protein wheat
 - X_{hi} = quantity of U.S. exports of high protein wheat
 - X_{lo} = quantity of U.S. exports of low protein wheat
 - S_{hi} = supply of high protein wheat
 - S_{lo} = supply of low protein wheat
 - P_{Φ_i} = protein percent of the high protein wheat crop
 - $P_{P_{i0}}$ = protein percent of the low protein wheat crop

The price ratio is employed as a measure of protein premiums. The ratio differs from the common definition of protein premium since it is a relative rather than absolute measure. The ratio avoids the need to deflate prices. An increase in the ratio reflects a widening or increase in the premium and conversely a decrease means a narrowing or decrease in the premium.

Exports of the HPW were expected to be positively related to the price ratio. Conversely, a negative relationship was expected between exports of LPW and the price ratio.⁴

The protein supply varies with the supply of wheat and with the protein content of the wheat crops. The price ratio is expected to be negatively related to the supply and protein content of HPW and positively related to LPW. The rationale is that an increase in supply of high protein wheat, holding the supply of low protein wheat constant, would depress the premium; and an increase in supply of the lower protein wheat, holding the supply of high protein wheat constant, would increase the price ratio.

Estimating the Model

The model was estimated by ordinary least-squares regression analysis, utilizing annual crop year data for

⁴Opposite results can occur when the cross-product effects of a price change exceed the own-product effects. After a price increase, buyers may shift to a substitute, driving its price up relatively more than the original price rise.

the post-World War period.⁵ Linear, logarithmic and semilogarithmic models and several specifications for each relationship were investigated.

The first step was to classify classes as "hi" and "lo". A major consideration was the availability of data. Production and stock data are available for the five major classes of wheat for the United States. Export data are available for the five classes by port area. HRW, HRS, and white wheats were selected. The first two are the main high protein wheats and White is the main wheat exported from the Pacific Northwest. Terminal market prices are quoted in Portland by protein content for spring and winter wheats. Protein content for wheat crops is published by State in the main hard wheat area; Montana and North Dakota were selected to represent HRS and Kansas was chosen to represent the protein content in the HRW crop.

Results

To test the models two price ratios were formed: PS14/PW12 and PW12/PWH.⁶ The three prices employed represent the predominant wheats in the Portland market. Equations (2) and (3) are estimated relationships for these price ratios. Each reported equation includes regression coefficients and their t-values, the standard error of the estimate (S), the adjusted coefficient of multiple determinations (R²), and the Durbin-Watson statistic (D.W.).

$$(2) \text{ PS14/PW12} = 2.898 + .0096 \ln \text{XSPUS/WN} \\ + .3932 \ln \text{SSP} \\ (32.1) \\ + .2079 \ln \text{SWN} - .5278 \ln \text{PPND} \\ + .2213 \ln \text{PPK} \\ (10.5) \quad (9.3) \quad (5.0) \\ S = .0041 \quad R^2 = .99 \quad \text{D.W.} = 2.61$$

In means natural logarithm of the variable

$$(3) \text{ PW12/PWH} = .7456 - .0002 \text{XWNUS} \\ + .0111 \text{XPL} \\ (7.2) \\ + .006 \text{YEAR} \\ (5.4) \\ S = .0225 \quad R^2 = .93 \quad \text{D.W.} = 1.54$$

⁵Statistical problems of simultaneity were sufficiently minor to warrant using OLS analysis.

⁶Correlation coefficients (r) were calculated to compare the ratios of the prices employed in the analysis with the differences of each pair of prices. For PS14/PW12 and PS14/PWH, r = .97 for 1965/66-1973/74; for PW12/PWH and PW12-PWH, r = .95 for 1952/53-1973/74. These high correlations indicate that changes in the ratios are closely related to changes in the differences.

Prices

- PS14 = price of Montana Dark Northern Spring wheat, 14 percent protein, in Portland, dollars per bushel.
- PW12 = price of No. 1 hard winter wheat, 12 percent protein, in Portland, dollars per bushel.
- PWH = price of No. 1 soft White wheat, in Portland, dollars per bushel.
- PS14/PW12 = PS14 divided by PW12 (ratios of other prices were similarly formed).

Exports

- XWNUS = quantity of HRW wheat exported from all U.S. ports, million bushels.
- XSPUS = quantity of HRS wheat exported from all U.S. ports, million bushels.
- XSPUS/WN = XSPUS divided by XWNUS (ratios of other export variables were similarly formed).
- XPL = quantity of noncommercial wheat exports minus commercial and barter exports, million bushels.

Supply

- SWN = quantity of production + carryover of HRW wheat in the U.S., million bushels.
- SSP = quantity of production + carryover of HRS wheat in the U.S., million bushels.
- SSP/WN = SSP divided by SWN.

Protein

- PPND = average protein percent of spring wheat produced in North Dakota (excluding Durum).
- PPR = average protein percent of winter wheat produced in Kansas.

Trend

- YEAR = 1952 = 52, 1953 = 53 .. 1973 = 73.

HRS versus HRW

The time period 1965/66-1973/74 was selected because 1965 marked the beginning of substantial HRS wheat exports from Pacific Northwest ports. The statistical results of equation (2) and its graphic representation indicate that the selected variables and the manner in which they are employed provides a good estimate of the price ratio (figure 2). About 99 percent of the variation in the price ratio PS14/PW12, is accounted for by the 5 independent variables. According to equation (2):

(a) As exports of spring wheat increase, the price ratio increases and as exports of winter wheat increase the ratio decreases. This relationship matches those hypothesized.

(b) As expected, increases in the supply of HRS depress the ratio while increases in HRW buoy the ratio.

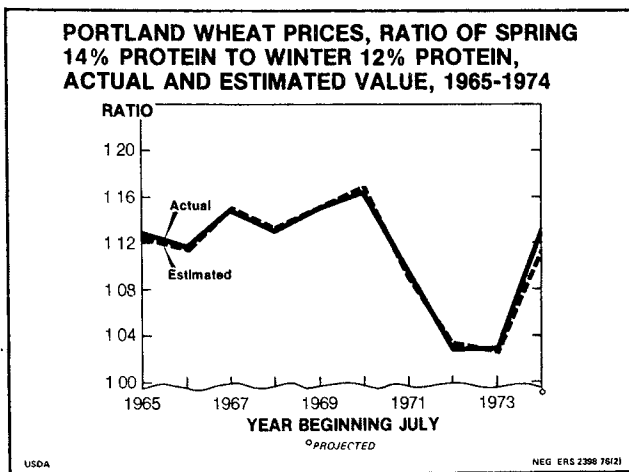


Figure 2

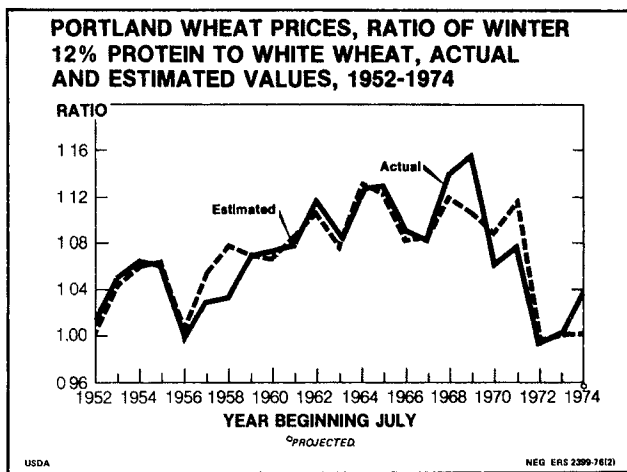


Figure 3

(c) The increase in protein content of North Dakota spring wheat reduce the ratio; protein increases in Kansas winter wheat increase the ratio.

The regression coefficients in equation (2) indicate the impact of a percent change in each independent variable. For example, holding other variables constant, a percent rise in the supply of HRS is estimated to reduce the price of 14 percent HRS in Portland by 0.4 percent, relative to the price of 12 percent protein winter wheat.

As shown in figure 2, the price ratio, PS14/PW12, declined in 1971/72 and 1972/73. The first decline was caused almost entirely by an increased supply of HRS. The decline the next year resulted from negative impacts from all five independent variables. The following year there was little change in the price ratio as changes in some variables were offset by changes in others. However, the ratio increased in 1974/75, primarily due to a decrease in U.S. production and carryover of HRS.

This analysis indicates that the wide swings in protein premiums since 1970/71 were largely the consequence of changes in supplies of HRS. Exports and the other variables contributed to changes in the price relationship but were not the principal factors.

HRW versus White Wheat

Figure 3 illustrates actual versus estimated values of the price ratio, PW12/PWH, for 1952/53 - 1973/74 and actual and predicted values for 1974/75 based on equation (3).

Equation (3) employs three export variables and a trend variable. The export variables are in actual values. The equation indicates that:

(a) increases in exports of both wheat classes reduce the ratio. The negative relationship between White wheat exports (XWHUS) and PW12/PWH supports the hypothesis that an increase in export demand of a lower protein wheat reduces the price ratio. However, the negative relationship of HRW exports (XWNUS) represents the less typical case, suggesting that increases in

HRW exports exert a relatively greater upward pressure on White wheat prices than on HRW wheat prices. Buyers may have shifted to lower priced White wheat, pushing up PWH relatively more or the increase in HRW exports may have come to proteins less than 12 percent.

(b) A 1-million-bushel increase in exports under PL-480 and other noncommercial government programs is associated with a 1.1-percent rise in PW12/PWH. During the study period these exports were substantial.

(c) The price ratio, PW12/PWH, increased through time.

The PW12/PWH price ratio rose from 1956/57 to the late 1960's, then declined. Equation (3) captures the decline after 1971/72 (figure 3). Changes in exports are the principal factors associated with the decline in PW12/PWH in recent years.⁸

The estimated relationships for relative prices of HRW (12 percent) and White wheat are more complex and resulted in less successful statistical estimation than the HRS/HRW analysis. The HRW market is broad geographically and there are a wide range of uses for both HRW and White wheat. This suggests that a more comprehensive model is needed to fully capture the factors affecting changes in the price ratio. For example, it was not possible to establish a strong statistical relationship between PW12/PWH and supply variables. During much of the study period there was an exceptionally large carryover of wheat, mainly controlled by the government. In such a situation, the relationship between supplies and market prices is likely to differ from that in a period of lower carryovers. Carryovers in the 1970's are relatively low. Thus, in future studies of

⁷A further examination of the relationship between PL 480 sales and price ratios, while interesting, is beyond the scope of this research.

⁸Recall that the USSR purchased large quantities of wheat from the U.S. during this period. Almost all of the wheat they purchased was HRW. Equation (3) reflects this by indicating that more than half of the change in the PW12/PWH ratio is explained by increased exports of winter wheat.

price relationships between HRW and White wheat the effects of supply should be reexamined.

SUMMARY

HPW has traditionally been priced at a premium over LPW. Factors strongly influencing this price difference

are: 1) the level of exports; 2) the supply of HPW; and 3) the average protein content of the HPW crop. Changes during the 1972/73-1974/75 period resulted in a break in the premium tradition, in some cases HPW being discounted to LPW. The relationship derived in this study provide a method of forecasting premiums once the causal factors are quantified.

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TABLE 2. --WHEAT CLASSES: MARKETING YEAR SUPPLY AND DISAPPEARANCE,
1972-75 1/*

YEAR BEGINNING JULY 1	SUPPLY			DISAPPEARANCE			ENDING STOCKS JUNE 30
	BEGIN- NING STOCKS	PRO- DUCTION	TOTAL 2/	DOMESTIC USE	EXPORTS 3/	TOTAL	
MILLION BUSHELS							
1972/73							
HARD WINTER	471	761	1,232	327	704	1,031	201
RED WINTER	18	226	244	168	68	236	8
HARD SPRING	275	276	552	181	198	379	173
DURUM	69	73	142	40	65	105	37
WHITE	30	209	239	69	151	220	19
ALL CLASSES	863	1,545	2,409	785	1,186	1,971	438 4/
1973/74							
HARD WINTER	201	957	1,158	301	731	1,032	126
RED WINTER	8	159	167	133	25	158	9
HARD SPRING	173	328	503	209	228	437	66
DURUM	37	79	117	47	42	89	28
WHITE	19	182	202	62	122	184	18
ALL CLASSES	438 4/	1,705	2,147	752	1,148	1,900	247
1974/75 5/							
HARD WINTER	126	879	1,005	301	518	819	186
RED WINTER	9	288	297	133	144	277	20
HARD SPRING	66	293	360	160	130	290	70
DURUM	28	81	110	40	49	89	21
WHITE	18	255	273	45	198	243	30
ALL CLASSES	247	1,796	2,046	680	1,039	1,719	327
1975/76 6/							
HARD WINTER	186	1,056	1,242	267	735	1,002	240
RED WINTER	20	342	362	165	175	340	22
HARD SPRING	70	328	399	155	160	315	84
DURUM	21	123	145	43	60	103	42
WHITE	30	285	315	55	220	275	40
ALL CLASSES	327	2,134	2,463	685	1,350	2,035	428

1/ DATA, EXCEPT PRODUCTION, ARE APPROXIMATIONS; FORECASTED DISAPPEARANCE FIGURES SHOULD BE REGARDED AS THE MIDPOINT OF ESTIMATED RANGES 2/ TOTAL SUPPLY INCLUDES IMPORTS. 3/ IMPORTS AND EXPORTS INCLUDE FLOUR AND OTHER PRODUCTS IN WHEAT EQUIVALENTS. 4/ EXCLUDES AN ABNORMALLY LARGE VOLUME OF GRAIN IN TRANSIT. 5/ PRELIMINARY. 6/ FORECAST.
* TOTALS MAY NOT ADD DUE TO ROUNDING.

TABLE 3.--WHEAT: MARKETING YEAR SUPPLY AND DISAPPEARANCE, QUARTERLY, 1966-70 AVERAGE AND ANNUAL 1971-75*

YEAR AND QUARTERS BEGINNING JULY 1	SUPPLY				DISAPPEARANCE							ENDING STOCKS JUNE 30
	BEGINNING STOCKS	PRO- DUCTION	IMPORTS	TOTAL	DOMESTIC USE			EXPORTS 1/	TOTAL DISAPPEAR- ANCE			
					FOOD 1/	SEED 2/	FEED 2/					
MILLION BUSHELS												
1966-70 (AVG.)												
JULY-SEPT.	640	1,433	3/	2,073	132	27	76	235	172	407	1,666	
OCT.-DEC.	1,666	---	3/	1,666	133	24	15	172	186	358	1,308	
JAN.-MAR.	1,308	---	3/	1,308	130	3/	42	172	155	327	981	
APR.-JUNE	981	---	1	982	121	15	1	137	166	303	679	
MKT. YEAR	640	1,433	1	2,074	516	66	134	716	679	1,395	679	
1971/72												
JULY-SEPT.	731	1,618	3/	2,349	136	24	152	312	164	476	1,873	
OCT.-DEC.	1,873	---	3/	1,873	133	24	39	196	130	326	1,547	
JAN.-MAR.	1,547	---	3/	1,547	130	3/	60	190	147	337	1,210	
APR.-JUNE	1,210	---	1	1,211	127	15	15	157	191	348	863	
MKT. YEAR	731	1,618	1	2,350	526	63	266	855	632	1,487	863	
1972/73												
JULY-SEPT.	863	1,545	3/	2,408	133	24	168	325	213	538	1,870	
OCT.-DEC.	1,870	---	3/	1,870	136	23	25	184	287	471	1,399	
JAN.-MAR.	1,399	---	3/	1,399	132	1	30	163	309	472	927	
APR.-JUNE	927	---	1	928	127	19	-33	113	377	490	438	
MKT. YEAR	863	1,545	1	2,409	528	67	190	785	1,186	1,971	438	
1973/74												
JULY-SEPT.	438	1,705	1	2,144	134	30	135	299	396	695	1,449	
OCT.-DEC.	1,449	---	3/	1,449	140	29	13	182	340	522	927	
JAN.-MAR.	927	---	3/	927	135	1	11	147	232	379	548	
APR.-JUNE	548	---	3	551	119	24	-19	124	180	304	247	
MKT. YEAR	438	1,705	4	2,147	528	84	140	752	1,148	1,900	247	
1974/75 4/												
JULY-SEPT.	247	1,796	1	2,044	132	32	48	212	269	481	1,563	
OCT.-DEC.	1,563	---	1	1,564	138	30	5	173	283	456	1,108	
JAN.-MAR.	1,108	---	3/	1,108	123	1	67	191	255	446	662	
APR.-JUNE	662	---	3/	662	132	25	-54	103	232	335	327	
MKT. YEAR	247	1,796	2	2,046	525	88	67	680	1,039	1,719	327	
1975/76												
JULY-SEPT.	327	2,134	1	2,462	144	33	47	224	347	571	1,891	
OCT.-DEC. 4/	1,891	---	1	1,892	143	32	-11	164	343	507	1,385	
JAN.-MAR.												
APR.-JUNE												
MKT. YEAR 5/	327	2,134	2	2,463	530	90	77- 52	697- 672	1,300- 1,400	1,997- 2,072	466- 391	

1/ INCLUDES FLOUR, BULGAR, ROLLED WHEAT, SEMOLINA AND MACARONI IN WHEAT EQUIVALENTS; GRAIN EXPORTS ADJUSTED FOR TRANSHIPMENT THROUGH CANADA. 2/ RESIDUAL; APPROXIMATES FEED USE AND INCLUDES NEGLIGIBLE QUANTITIES USED FOR DISTILLED SPIRITS AND BEER. 3/ LESS THAN 500,000 BUSHELS. 4/ PRELIMINARY. 5/ FORECAST. * TOTALS MAY NOT ADD DUE TO ROUNDING.

Table 4.--Wheat: Current indicators of export movement,
by program, coastal area and class of wheat,
July-December 1974 and 1975

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>July-December 1974</u>							
Dollars	231.1	85.8	67.0	19.4	100.8	3.5	507.6
CCC Credit	4.8	---	---	---	---	---	4.8
Commercial	235.9	85.8	67.0	19.4	100.8	3.5	512.4
P.L. 480	8.0	4.3	---	---	2.6	.8	15.7
Total	243.9	90.1	67.0	19.4	103.4	4.3	528.1
<u>July-December 1975</u>							
Dollars	309.2	75.2	91.8	38.3	89.7	.8	605.0
CCC Credit	6.9	1.3	---	---	4.6	---	12.8
Commercial	316.1	76.5	91.8	38.3	94.3	.8	617.8
P.L. 480	17.1	22.3	---	---	4.9	---	44.3
Total	333.2	98.8	91.8	38.3	99.2	.8	662.1
<u>July-December 1974</u>							
Coastal areas:							
Great Lakes	---	.5	19.6	14.7	.3	---	35.1
Atlantic	---	46.7	---	.1	6.1	---	52.9
Gulf	190.0	42.3	19.7	4.1	---	.2	256.3
Pacific	53.9	.6	27.7	.5	97.0	4.1	183.8
Total	243.9	90.1	67.0	19.4	103.4	4.3	528.1
<u>July-December 1975</u>							
Coastal areas:							
Great Lakes	---	5.0	39.7	31.8	4.1	---	80.6
Atlantic	---	40.2	---	---	8.4	---	48.6
Gulf	252.5	53.6	26.9	5.9	---	.6	339.5
Pacific	80.7	---	25.2	.6	86.7	.2	193.4
Total	333.2	98.8	91.8	38.3	99.2	.8	662.1

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

Agricultural Marketing Service, Grain Division.

Table 5.--Wheat: U.S. inspections for export, by programs and major country of destination, July-December 1974 and 1975

Year and Country	Dollar sales	CCC credit	P.L. 480	Total
			----- 1,000 bushels -----	
<u>July-December 1975</u>				
Algeria	20,820	---	---	20,820
Bangladesh	7,100	---	7,984	15,084
Belgium	8,045	---	---	8,045
Brazil	53,433	---	---	53,433
Chile	---	---	11,417	11,417
China (Taiwan)	8,617	---	---	8,617
Colombia	7,571	---	---	7,571
Costa Rica	1,552	---	---	1,552
Dominican Republic	2,328	386	---	2,714
Ecuador	4,266	---	---	4,266
Egypt	8,940	---	5,247	14,187
El Salvador	1,541	---	---	1,541
France	1,425	---	---	1,425
Germany, West	22,661	---	---	22,661
Guatemala	1,497	---	---	1,497
Haiti	1,744	---	---	1,744
Hong Kong	1,436	---	---	1,436
India	72,751	207	8,053	81,011
Indonesia	10,628	---	---	10,628
Iran	2,815	---	---	2,815
Iraq	1,826	---	---	1,826
Israel	9,712	---	2,230	11,942
Italy	8,684	---	---	8,684
Japan	57,036	---	---	57,036
Korea	23,791	2,313	---	26,104
Morocco	3,216	---	---	3,216
Netherlands	37,816	---	---	37,816
Nigeria	7,361	---	---	7,361
Pakistan	6,925	2,979	9,286	19,190
Peru	6,269	4,799	---	11,068
Philippines	13,227	---	---	13,227
Poland	13,564	2,101	---	15,665
Portugal	1,010	---	---	1,010
Romania	3,170	---	---	3,170
Sudan	4,061	---	---	4,061
Syrian Arab Republic	2,481	---	---	2,481
Thailand	1,411	---	---	1,411
Trinidad	2,042	---	---	2,042
Tunisia	2,763	---	---	2,763
United Kingdom	6,275	---	---	6,275
USSR	125,179	---	---	125,179
Venezuela	13,039	---	---	13,039
Zaire	2,267	---	---	2,267
Other	12,726	---	55	12,781
Grand Total	605,021	12,785	44,272	662,078
<u>July-December 1974</u>				
Algeria	11,954	---	---	11,954
Bangladesh	6,068	---	4,592	10,660
Belgium	3,447	---	---	3,447
Brazil	10,321	---	---	10,321
Chile	4,140	1,279	2,281	7,700
China (Taiwan)	6,722	---	---	6,722
Colombia	7,723	---	---	7,723
Dominican Republic	3,028	---	---	3,028
Ecuador	3,134	---	---	3,134
Egypt	295	---	5,922	6,217
France	3,739	---	---	3,739
Germany, West	2,906	---	---	2,906
India	82,680	---	315	82,995
Iran	40,203	---	---	40,203
Iraq	15,070	---	---	15,070
Israel	4,173	---	1,193	5,366
Italy	5,198	---	---	5,198
Japan	60,434	---	---	60,434
Korea	30,545	---	---	30,545
Mexico	21,425	---	---	21,425
Morocco	6,053	---	---	6,053
Netherlands	22,906	---	---	22,906
Nigeria	2,737	---	---	2,737
Pakistan	14,768	---	490	15,258
Peoples Rep. of China	54,842	---	---	54,842
Peru	7,034	3,473	---	10,507
Philippines	7,711	---	---	7,711
Portugal	3,482	---	---	3,482
Tunisia	2,105	---	---	2,105
Turkey	12,811	---	---	12,811
USSR	11,496	---	---	11,496
Venezuela	9,245	---	---	9,245
Yugoslavia	2,706	---	---	2,706
Other	26,550	---	937	27,487
Grand Total	507,651	4,752	15,730	528,133

Based on weekly reports of inspections for export by licensed grain inspectors and does not include rail and truck movement to Canada or Mexico.

Agriculture Marketing Service, Grain Division.

Table 6 --Wheat: Farm price, loan rate per bushel and price for equivalent quantity of major feed grain in region, 1974-76 ^{1/}

Item	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Simple average	Support rate
- - - Price for 60 pounds (bushel weight of wheat) - - -														
<u>Central and So. Plains (Hd. winter) 2/</u>														
Wheat 1974/75	3.92	3.91	3.97	4.52	4.50	4.41	3.96	3.71	3.33	3.32	3.01	2.81	3.78	1.32
Sorghum 1974/75	2.42	3.11	3.14	3.38	3.44	3.14	2.92	2.51	2.41	2.47	2.50	2.50	2.83	1.10
Wheat 1975/76	3.31	3.63	3.78	3.72	3.34	3.19	3.25							1.32
Sorghum 1975/76	2.55	2.82	2.69	2.64	2.41	2.38	2.42							1.10
<u>Cornbelt (Soft red winter) 3/</u>														
Wheat 1974/75	4.00	4.02	4.00	4.58	4.44	4.28	3.86	3.71	3.32	3.28	2.92	2.71	3.76	1.39
Corn 1974/75	3.18	3.69	3.55	3.73	3.57	3.53	3.32	3.07	2.89	2.87	2.81	2.87	3.26	1.34
Wheat 1975/76	3.18	3.47	3.60	3.52	3.15	3.05	3.24							1.41
Corn 1975/76	2.91	3.15	2.92	2.75	2.45	2.53	2.63							1.24
<u>East and South (Soft red winter) 4/</u>														
Wheat 1974/75	3.72	3.86	3.83	4.14	4.14	3.99	3.76	3.52	3.26	3.26	2.99	2.70	3.60	1.38
Corn 1974/75	3.21	3.71	3.62	3.72	3.67	3.62	3.51	3.32	3.07	3.11	3.03	3.00	3.38	1.35
Wheat 1975/76	2.97	3.30	3.48	3.49	3.22	3.18	3.16							1.38
Corn 1975/76	3.04	3.21	3.02	2.96	2.71	2.72	2.79							1.34
<u>Northern Plains (Spring and durum) 5/</u>														
Wheat 1974/75	4.80	4.64	4.66	5.16	5.33	4.99	4.48	4.27	4.04	4.18	4.01	3.74	4.52	1.39
Barley 1974/75	2.96	3.42	3.55	4.04	4.44	4.22	4.11	3.89	3.34	3.55	3.51	3.00	3.67	1.00
Wheat 1975/76	4.12	4.41	4.52	4.41	3.92	3.71	3.77							1.38
Barley 1975/76	3.04	3.15	3.68	3.58	3.15	3.00	2.84							1.00
<u>Pacific Northwest (White) 6/</u>														
Wheat 1974/75	4.24	4.21	4.21	4.78	4.78	4.63	4.25	3.97	3.53	3.52	3.17	2.98	4.02	1.41
Barley 1974/75	3.04	3.61	3.69	3.85	4.25	4.14	3.94	3.46	2.99	3.20	3.12	3.01	3.53	1.26
Wheat 1975/76	3.48	3.88	3.99	3.91	3.49	3.40	3.47							1.42
Barley 1975/76	2.94	3.27	3.42	3.24	2.88	2.80	2.84							1.26
<u>U.S. Average</u>														
Wheat 1974/75	4.04	4.24	4.32	4.85	4.87	4.65	4.11	3.95	3.65	3.69	3.47	2.92	7/4.04	1.37
Wheat 1975/76	3.33	3.89	4.11	4.02	3.58	3.41	3.43							1.37

^{1/} 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. ^{2/} Kansas, Nebraska, Texas, Oklahoma, and Colorado. ^{3/} Ohio, Indiana, Illinois, and Missouri. ^{4/} Pennsylvania, Maryland, Virginia, North Carolina, South Carolina, Georgia, Mississippi, Alabama, Louisiana, and Arkansas. ^{5/} North Dakota, South Dakota, and Minnesota. ^{6/} Washington, Oregon, and Idaho. ^{7/} Season average price including allowance for unredeemed loans and purchases by CCC.

Table 7.--Wheat: Cash prices for leading classes at major markets, 1974-76 ^{1/}

Major Market and Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Simple average
- - - - Dollars per bushel - - - -													
<u>No. 1 HRW, Kansas City</u>													
<u>Ordinary protein</u>													
1974/75	4.36	4.33	4.35	4.94	4.88	4.66	4.15	3.93	3.69	3.66	3.34	3.23	4.13
1975/76	3.61	4.12	4.21	4.09	3.71	3.50	3.57						
<u>13% protein</u>													
1974/75	4.78	4.74	4.85	5.47	5.36	5.15	4.64	4.31	4.08	4.07	3.77	3.81	4.59
1975/76	4.10	4.45	4.55	4.46	4.13	3.97	4.00						
<u>No. 2 SRW, Chicago</u>													
1974/75	4.40	4.34	4.41	5.03	4.86	4.60	4.02	3.84	3.62	3.63	3.25	3.03	4.09
1975/76	3.42	3.82	4.06	3.84	3.49	3.32	3.45						
<u>No. 2 SRW, St. Louis</u>													
1974/75	4.35	4.24	4.36	4.86	4.70	4.57	4.04	3.86	3.68	3.58	3.20	2.94	4.03
1975/76	3.29	3.71	3.76	3.63	3.50	3.36	3.49						
<u>No. 2 SRW, Toledo</u>													
1974/75	4.29	4.28	4.33	4.93	4.81	4.59	4.00	3.83	3.60	3.52	3.07	2.96	4.02
1975/76	3.27	3.71	3.86	3.69	3.34	3.28	3.37						
<u>No. 2 SW, Toledo</u>													
1974/75	4.24	4.22	4.22	4.78	4.63	4.44	3.85	3.67	3.44	3.37	2.95	2.85	3.89
1975/76	3.21	3.62	3.78	3.60	3.28	3.23	3.32						
<u>No. 1 SW, Portland</u>													
1974/75	4.66	4.57	4.57	5.17	5.16	5.06	4.45	4.15	3.94	3.88	3.48	3.33	4.37
1975/76	3.79	4.27	4.39	4.23	3.85	3.73	3.80						
<u>No. 1 DK. NS, Minneapolis</u>													
<u>Ordinary protein</u>													
1974/75	4.76	4.65	4.62	5.25	5.42	5.06	4.39	4.12	4.05	4.03	3.96	3.73	4.50
1975/76	3.93	4.23	4.12	3.94	3.51	3.50	3.55						
<u>15% protein</u>													
1974/75	5.36	5.07	5.20	5.63	5.62	5.38	4.80	4.49	4.53	4.56	4.43	4.30	4.94
1975/76	4.69	4.90	5.12	5.03	4.74	4.46	4.54						
<u>Hard amber durum, Mpls.</u>													
1974/75	7.17	6.66	6.70	7.17	7.16	6.61	5.98	6.08	5.87	6.33	6.23	5.27	6.44
1975/76	5.51	6.14	6.15	5.77	5.13	4.53	4.47						

WS-235, February 1976

^{1/} On-track prices established at the close of the market.

Table 8 --Wheat and flour: Price relationships at milling centers annual and by quarters, 1972-75

Year and month	At Kansas City					At Minneapolis				
	Cost of wheat to produce 100 lb. of flour 1/	Wholesale price of-				Cost of wheat to produce 100 lb. of flour 1/	Wholesale price of-			
		Bakery flour per 100 lb. 2/	Byproducts obtained 100 lb. flour 3/	Total products			Bakery flour per 100 lb. 2/	Byproducts obtained 100 lb. flour 3/	Total products	
				Actual	Over cost of wheat				Actual	Over cost of wheat
----- Dollars -----										
<u>1972/73</u>										
July-Sept.	6.06	5.99	.81	6.80	.74	5.97	6.48	.76	7.24	1.27
Oct.-Dec.	7.15	6.80	1.19	7.99	.84	6.82	7.14	1.13	8.27	1.45
Jan.-Mar.	7.50	7.02	1.27	8.29	.79	7.05	7.34	1.22	8.56	1.51
Apr.-June	7.82	7.31	1.19	8.50	.68	7.55	7.51	1.19	8.70	1.15
Season average:	7.13	6.78	1.11	7.89	.76	6.85	7.12	1.07	8.19	1.34
<u>1973/74</u>										
July-Sept.	9.76	9.13	1.54	10.67	.91	9.36	9.54	1.50	11.04	1.68
Oct.-Dec.	11.18	10.35	1.85	12.20	1.02	10.57	10.55	1.77	12.32	1.75
Jan.-Mar.	12.67	12.85	1.65	14.50	1.83	12.64	13.00	1.59	14.59	1.95
Apr.-June	9.48	9.54	1.41	10.95	1.47	10.16	10.33	1.38	11.71	1.55
Season average:	10.77	10.47	1.61	12.08	1.31	10.68	10.85	1.56	12.41	1.73
<u>1974/75</u>										
July-Sept.	10.92	10.40	1.77	12.17	1.25	11.52	11.65	1.77	13.42	1.90
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.-June	8.86	8.54	1.40	9.94	1.08	9.88	9.92	1.42	11.34	1.46
Season average:	10.46	10.06	1.64	11.70	1.24	11.01	11.28	1.62	12.90	1.89
<u>1975/76</u>										
July-Sept.	9.95	9.50	1.50	11.00	1.05	10.68	10.65	1.46	12.11	1.43
Oct.-Dec. 4/	9.55	9.58	1.67	11.25	1.70	10.12	10.66	1.56	12.22	2.10
Jan.-Mar.										
Apr.-June										
Season average:										

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. Beginning July 1973 excludes domestic certificate. 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 9 --Cereal and bakery products: Retail price index, 1965-75

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
(Index 1967 = 100)													
1965	93.8	93.4	93.6	93.7	93.5	93.7	93.8	93.8	93.9	93.9	94.0	94.7	93.8
1966	95.4	95.5	95.9	96.3	96.5	96.8	96.9	99.0	99.9	99.8	100.1	100.3	97.7
1967	100.3	100.0	100.1	100.0	100.3	99.8	99.7	99.9	99.9	99.7	99.9	99.9	100.0
1968	99.8	99.7	99.7	99.8	99.9	100.1	100.6	100.9	101.1	101.1	101.4	101.4	100.4
1969	101.7	101.9	102.3	102.4	102.6	103.0	103.5	103.5	103.8	104.4	104.7	105.4	103.3
1970	105.9	106.6	107.2	107.7	108.0	108.2	108.7	109.8	110.2	111.0	111.2	111.6	108.9
1971	112.4	112.8	113.0	113.9	114.1	114.2	114.8	114.5	114.6	114.3	114.1	113.8	113.9
1972	113.7	114.3	114.8	115.0	114.7	114.5	114.4	114.4	114.6	114.6	115.0	115.8	114.7
1973	116.3	117.8	119.0	120.2	122.1	123.0	123.5	124.7	132.4	139.0	145.8	148.5	127.7
1974	149.7	154.4	158.6	161.4	164.3	165.3	166.7	168.2	170.4	174.7	177.6	181.7	166.1
1975	185.3	187.3	189.1	188.9	187.0	185.2	184.6	182.6	181.6	181.6	181.9	182.2	184.8

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

Table 10.--White pan bread: Estimated retail and wholesale price of a 1-pound loaf; retailer's, wholesaler's, miller's, and other spreads; farm value of ingredients; flour and wheat prices and related data, by quarters, monthly October-December and annual average, 1975

Item	Unit	I	II	III	Oct.	Nov.	Dec.	IV	1975 Preliminary
Retail price <u>1/</u>	Cents per loaf	37.3	36.2	35.2	35.2	35.3	35.1	35.2	36.0
Retail spread <u>2/</u>	"	5.6	4.7	4.0	3.9	3.8	3.7	3.8	4.6
Wholesale price <u>3/</u>	"	31.7	31.5	31.2	31.3	31.5	31.4	31.4	31.4
Baker-wholesaler spread <u>4/</u>	"	20.7	21.9	20.9	21.1	21.9	22.3	21.8	21.3
Cost to baker									
All ingredients <u>5/</u>	"	11.0	9.6	10.3	10.2	9.6	9.1	9.6	10.1
Flour <u>6/</u>	"	6.5	5.9	6.7	6.8	6.4	6.1	6.4	6.4
Mill sales value of flour <u>6/</u>	"	6.0	5.5	6.2	6.4	5.9	5.6	6.0	5.9
Miller's flour spread <u>7/</u>	"	.6	.5	.7	.9	.8	.9	.9	.6
Cost of wheat to miller <u>8/</u>	"	5.4	5.0	5.6	5.5	5.1	4.7	5.1	5.3
Other spreads <u>9/</u>	"	2.9	2.9	2.6	2.3	2.5	2.3	2.3	2.7
Farm value									
All ingredients <u>10/</u>	"	7.5	6.2	7.0	7.0	6.3	5.9	6.4	6.8
Wheat <u>11/</u>	"	4.7	4.0	4.7	4.8	4.3	4.1	4.4	4.5
Flour prices <u>12/</u>									
F.o.b. mill	Dol. per cwt.	9.57	8.73	9.83	10.14	9.35	8.86	9.45	9.40
Delivered to bakers	"	10.21	9.38	10.54	10.79	10.04	9.65	10.16	10.07
Flour sales <u>12/</u>									
Sold in bags	Percent	20	17	16	18	15	20	18	18
Price differential for bags	Cents per cwt.	34	35	33	33	31	32	32	33
Wheat prices *									
Farm delivery point <u>13/</u>	Dol. per bu.	3.80	3.27	3.76	3.90	3.49	3.36	3.58	3.60
Delivered to millers	"	4.39	4.07	4.44	4.45	4.20	3.87	4.17	4.27

1/ Based on prices reported by Bureau of Labor Statistics. 2/ Spread between retail and wholesale prices. 3/ Estimated from BLS prices and trade data. 4/ Spread between wholesale price and cost to baker of all ingredients. 5/ Cost of flour plus shortening, nonfat dry milk, sugar and other minor nonfarm produced ingredients. 6/ Cost or sales value of flour (0.6329 lb.) used per pound of bread. 7/ Spread between mill sales value of flour and cost of wheat to miller. 8/ Cost of wheat (.01445 bu.), net of imputed cost of wheat chargeable to millfeed byproducts. 9/ Charges for transporting, handling, processing ingredients other than flour and cost of nonfarm produced ingredients such as yeast, salt, and malt extract. This spread is a residual figure. 10/ Returns to farmers for wheat, shortening, nonfat dry milk, and sugar used in a 1-pound loaf. 11/ Returns to farmers for wheat, net of imputed cost of wheat chargeable to millfeed byproducts. 12/ Based on monthly sales and prices of bread-type flour reported by a sample of flour milling firms. 13/ Weighted average for hard winter and spring wheat in the 10 major wheat producing States.

*Wheat and flour prices do not include allowance for marketing certificate since July 1, 1973, effective date of repeal.

Note: Price spreads may not add due to rounding.

Commodity Economics Division, ERS.

Table 11.--Wheat: Monthly average export prices at selected ports, 1973-76 ^{1/}

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Simple average
----- Cents per bushel -----													
GULF PORTS: NO. 2 HARD RED WINTER, ORDINARY PROTEIN													
1973/74	320	493	524	489	495	543	588	603	529	430	382	428	485
1974/75	460	456	464	523	511	506	447	417	400	390	359	346	440
1975/76	395	443	450	439	400	388	391						
BALTIMORE: NO. 1 SOFT RED WINTER													
1973/74	322	488	516	481	483	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	456	458
1974/75	452	447	458	523	<u>2/</u>	485	427	407	385	376	330	319	419
1975/76	358	406	412	392	354	328	365						
PORTLAND: NO. 2 WESTERN WHITE													
1973/74	363	528	557	536	512	551	601	628	557	443	390	447	509
1974/75	479	466	468	533	522	514	459	421	399	393	356	343	446
1975/76	382	442	448	430	389	383	362						
DULUTH: NO. 2 NORTHERN SPRING, 14% PROTEIN													
1973/74	318	468	495	452	454	557	608	636	527	438	417	503	489
1974/75	526	503	512	569	560	560	<u>2/</u>	<u>2/</u>	437	436	442	426	497
1975/76	456	489	494	477	434	435	422						

^{1/} As of April 1, 1974 regulations covering export subsidy payments (GS 345-346-359) were revoked.

^{2/} No price quotes available.

Source: Grain Market News.

Table 12.--Wheat flour: Supply and utilization, 1960-75

Calendar year	Supply			Utilization								
	Production 1/	Imports of: dutiabie flour, semolina & products	Total supply and use	Exports and shipments				Used in the milling industry	Domestic disappearance for food			
				Commer- cial 2/	Flour only		Other pro- ducts in terms of flour 4/		Military 6/	Civilian 7/		Per capita
					USDA 3/	Total						
				----- 1,000 cwt. -----								
1960	255,596	141	255,737	14,194	28,174	42,368	487	88	2,927	3,638	209,867	118
1961	260,709	131	260,840	10,121	33,654	43,775	502	88	2,714	5,208	213,761	118
1962	262,403	132	262,535	14,065	33,997	48,062	371	88	2,860	5,379	211,154	115
1963	260,291	136	260,427	7,084	37,713	44,797	1,085	88	2,822	4,963	211,635	114
1964	261,905	142	262,047	9,909	32,968	42,877	541	88	2,310	4,910	216,231	114
1965	250,591	145	250,736	9,249	21,741	30,990	624	88	2,330	4,937	216,704	113
1966	253,176	179	253,355	13,732	19,761	33,493	1,522	88	2,500	4,530	215,752	112
1967	245,390	222	245,612	7,760	13,797	21,557	2,131	88	2,500	3,990	219,336	112
1968	254,310	233	254,543	6,969	21,651	28,620	2,476	88	3,000	4,096	220,359	112
1969	254,194	274	254,468	5,720	20,986	26,706	1,673	88	3,000	4,306	223,001	112
1970	253,094	325	253,419	3,557	22,867	26,424	1,661	88	3,000	4,421	222,246	110
1971	249,810	341	250,151	3,656	17,613	21,269	2,076	88	3,000	4,906	223,718	110
1972	250,441	477	250,918	4,696	16,384	21,080	2,373	88	2,500	4,404	224,877	109
1973	249,265	550	249,815	10,257	6,710	16,967	3,192	88	2,413	4,273	227,155	109
1974	242,084	665	242,749	9,538	5,521	15,059	3,890	88	2,235	2,626	221,477	106
1975 8/	246,658	606	247,264	N.A.	N.A.	13,026	5,630	88	2,267	---	226,253	107

1/ Based on commercial production of wheat flour, reported by Census; includes flour milled in bond from foreign wheat plus the estimated flour equivalent of farm wheat ground or exchanged for flour for farm household use, as reported by Statistical Reporting Service. 2/ Includes milled-in-bond flour. 3/ P.L. 480 and AID exports. 4/ Commercial exports and USDA procurement for export of semolina, macaroni and bakery products in terms of flour. 5/ Primarily for production of breakfast food. 6/ Flour and products in flour equivalent. 7/ Residual after all known disappearance items are subtracted from the supply; includes flour used by commercial bakeries and a small amount of flour used in manufacturing starch, gluten, dog and pet foods and for other industrial purposes. 8/ Preliminary, partly estimated. N.A. - Not available.

Table 13.--Wheat: Price support activity, cumulative, by months, 1971-75 crops ^{1/}

Item	Unit	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1971													
Placed under loan ^{2/}	Mil. bu.	77	134	252	318	343	359	409	420	427	434	437	438
Redeemed by farmers	"	---	---	6	14	27	44	71	91	135	182	207	227
Net under loan	"	77	134	246	304	316	315	338	329	292	252	230	211
Price above or below loan (\$1.25)	Dol.	.09	.03	.01	.05	.06	.09	.08	.09	.09	.11	.13	.08
1972													
Placed under loan ^{2/}	Mil. bu.	59	78	104	122	130	135	141	142	143	143	143	143
Redeemed by farmers	"	---	---	39	45	51	61	78	87	97	106	119	128
Net under loan	"	59	78	65	77	79	74	63	55	46	37	24	15
Price above or below loan (\$1.25)	Dol.	.07	.26	.48	.64	.72	1.13	1.13	.72	.81	.90	.90	1.18
1973													
Placed under loan ^{2/}	Mil. bu.	32	42	51	55	58	60	60	60	60	60	60	60
Redeemed by farmers	"	3	14	18	21	25	32	56	58	59	60	60	60
Net under loan	"	29	28	33	34	33	28	4	2	1	3/	3/	3/
Price above or below loan (\$1.25)	Dol.	1.22	3.20	3.37	2.97	2.95	3.53	4.04	4.27	3.71	2.73	2.27	2.32
1974													
Placed under loan ^{2/}	Mil. bu.	14	22	29	31	32	34	35	36	36	36	36	36
Redeemed by farmers	"	3/	2	4	8	11	13	17	19	22	26	32	35
Net under loan	"	14	20	25	23	21	21	18	17	14	10	4	1
Price above or below loan (\$1.37)	Dol.	2.67	2.87	2.95	3.48	3.50	3.28	2.74	2.58	2.28	2.32	2.10	1.55
1975													
Placed under loan ^{2/}	Mil. bu.	12	16	18	24	26	39						
Redeemed by farmers	"	3/	3	4	5	6	8						
Net under loan	"	12	13	14	19	20	31						
Price above or below loan (\$1.37)	Dol.	1.96	2.52	2.74	2.65	2.21	2.04						

^{1/} Based on operating reports.^{2/} Includes direct purchases.^{3/} Less than 500,000 bushels.

Table 14.--All wheat; winter, and spring: Acreage, yield and production
United States, 1970-76

Year of harvest	All wheat					Winter wheat									
	Acreage		Yield per harvested acre	Production	Acreage		Yield per harvested acre	Production							
	Planted	Harvested			Planted	Harvested									
	1,000 acres	Bushels	1,000 bushels	1,000 acres	Bushels	1,000 bushels									
1970	48,739	43,564	31.0	1,351,558	37,623	32,702	33.4	1,091,744							
1971	53,810	47,674	33.9	1,617,789	38,060	32,359	35.4	1,144,164							
1972	54,896	47,284	32.7	1,544,936	42,166	34,840	34.0	1,185,225							
1973	58,978	53,869	31.7	1,705,167	43,232	38,474	33.1	1,272,744							
1974	71,354	65,613	27.4	1,796,187	52,354	47,043	29.6	1,390,144							
1975 1/	75,095	69,656	30.6	2,133,803	56,163	51,544	32.0	1,651,209							
1976 2/	77,227				57,227			1,495,869							
	All spring wheat					Durum					Spring other than durum				
	Acreage		Yield per harvested acre	Production	Acreage		Yield per harvested acre	Production	Acreage		Yield per harvested acre	Production			
	Planted	Harvested			Planted	Harvested			Planted	Harvested					
	1,000 acres	Bushels	1,000 bushels	1,000 acres	Bushels	1,000 bushels	1,000 acres	Bushels	1,000 bushels						
1970	11,116	10,862	23.9	259,814	2,167	2,105	25.1	52,771	8,949	8,757	23.6	207,043			
1971	15,750	15,315	30.9	473,625	2,943	2,864	32.1	91,805	12,807	12,451	30.7	381,820			
1972	12,730	12,444	28.9	359,711	2,592	2,550	28.6	72,912	10,138	9,894	29.0	286,799			
1973	15,746	15,395	28.1	432,423	2,952	2,884	27.2	78,455	12,794	12,511	28.3	353,968			
1974	19,000	18,570	21.9	406,043	4,174	4,099	19.8	81,245	14,826	14,471	22.4	324,798			
1975 2/	18,932	18,112	26.6	482,594	4,820	4,670	26.4	123,182	14,112	13,442	26.7	359,412			
1976 2/	20,000			5,200				14,800							

1/ Preliminary.
2/ Indicated as of January 1.

Table 15.--Wheat: Stocks, United States, by quarters, 1970-76

Year	January 1					April 1				
	On farms	Off farm	Commodity	Total	On farms	Off farm	Commodity	Total		
		mills, elevators and warehouses 1/	Credit Corporation 2/			all positions	mills, elevators and warehouses 1/		Credit Corporation 2/	all positions
		1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels		
1970	609,443	922,434	941	1,532,818	456,499	739,803	944	1,197,246		
1971	526,092	881,946	1,932	1,409,970	381,098	677,407	1,930	1,060,435		
1972	694,191	851,077	2,023	1,547,291	525,478	682,983	1,978	1,210,439		
1973	509,808	886,974	1,827	1,398,609	315,926	609,431	1,822	927,179		
1974	363,323	562,139	1,813	927,275	181,328	365,000	1,441	547,769		
1975 3/	446,362	661,171	---	1,107,533	273,918	387,982	---	661,900		
1976 3/	546,513	838,393	---	1,384,906						
	July 1					October 1				
	1970	307,093	576,561	1,219	884,873	663,673	1,122,919	1,878	1,788,470	
	1971	240,276	489,388	1,814	731,478	826,402	1,045,046	1,886	1,873,334	
	1972	354,869	506,297	1,906	863,072	729,492	1,138,841	1,858	1,870,191	
	1973	133,876	302,759	1,819	438,454	606,132	841,267	1,817	1,449,216	
	1974	89,200	157,907	294	247,401	681,040	881,629	36	1,562,705	
	1975 3/	132,308	194,255	---	326,563	762,067	1,128,997	---	1,891,064	
	1976 3/									

1/ All off-farm storages not otherwise designated, including flour mills, terminal elevators and processing plants.
2/ Wheat owned by CCC and stored in bins or other storage owned or controlled by CCC. Other wheat owned by CCC as well as wheat outstanding under loan is included in other positions.
3/ Preliminary.

Table 16.--Wheat: Supply and disappearance, United States, Canada, Australia, and Argentina, average 1960-64 and 1965-69, annual 1972-75

Crop year	Supply			Disappearance	
	Beginning carryover <u>1/</u>	Production	Total <u>2/</u>	Domestic	Exports including flour
----- Million bushels -----					
United States					
Year beginning July 1					
Average 1960-64	1,228	1,222	2,455	605	721
1965-69	626	1,426	2,054	709	705
1972	863	1,545	2,409	785	1,186
1973	438	1,705	2,147	752	1,148
1974 <u>3/</u>	247	1,796	2,046	680	1,039
1975 <u>4/</u>	327	2,134	2,463	697-672	1,300 -1,400
Canada					
Year beginning August 1					
Average 1960-64	509	538	1,047	149	406
1965-69	604	678	1,282	162	417
1972	584	533	1,117	175	577
1973	365	594	959	169	419
1974 <u>3/</u>	371	489	860	177	395
1975 <u>4/</u>	288	625	913	178	485
Australia					
Year beginning December 1					
Average 1960-64	29	305	334	78	234
1965-69	88	387	475	97	242
1972	58	236	295	116	158
1973	21	437	458	136	249
1974 <u>3/</u>	73	413	486	121	315
1975 <u>4/</u>	50	408	458	122	294
Argentina					
Year beginning December 1					
Average 1960-64	36	263	299	135	113
1965-69	37	238	279	152	109
1972	14	254	284	157	117
1973	10	241	251	156	57
1974 <u>3/</u>	38	211	249	162	64
1975 <u>4/</u>	23	294	317	162	140

1/ From previous crops for the U.S. and Canada farm stocks are included; net changes in farm stocks for Australia and Argentina are reflected in domestic disappearance.

2/ Total supply includes imports.

3/ Preliminary.

4/ Estimated.

Compiled from records of Foreign Agricultural Service, Grain and Feed Division.

Table 17.--Wheat and wheat flour: World trade, production, stocks and consumption for 1972/73, 1973/74, 1974/75 and projected levels for 1975/76, years beginning July 1.

Country or region	1972/73	1973/74	1974/75	Projected for 1975/76	
			prel.	as of Oct. 31	as of Dec. 19
----- Million metric tons -----					
Exports:					
Canada	15.6	11.7	11.2	13.0	13.0
Australia	5.6	5.4	8.2	8.7	8.7
Argentina	3.4	1.1	2.2	2.8	3.5
Sub-total	24.6	18.2	21.6	24.5	25.2
W. Europe					
(Excluding intra EC-9)	6.9	5.8	8.5	7.9	7.5
USSR	1.3	5.0	4.0	0.5	0.5
All Others	2.8	2.1	1.5	1.0	1.4
Total non-U.S.	35.6	31.1	35.6	33.9	34.6
USA 1/	31.8	31.1	28.0	36.5	2/36.5
World total	67.4	62.2	63.6	70.4	71.1
(World total including intra EC-9)	(72.7)	(68.7)	(68.0)	(75.0)	(75.8)
Imports:					
W. Europe					
(Excluding intra EC-9)	8.2	6.3	6.3	7.2	7.0
USSR	14.9	4.4	2.5	14.0	14.0
Japan	5.5	5.4	5.4	5.7	5.7
E. Europe	4.6	5.3	4.6	4.3	4.6
China, People's Rep. of	5.3	5.6	5.7	3.0	3.0
All Others	28.9	35.2	39.1	36.2	36.8
World total	67.4	62.2	63.6	70.4	71.1
(World total including intra EC-9)	(72.7)	(68.7)	(68.0)	(75.0)	(75.8)
Production: 3/					
Canada	14.5	16.2	13.3	17.0	17.0
Australia	6.4	11.9	11.3	11.0	11.1
Argentina	6.9	6.6	5.7	7.7	8.0
W. Europe	51.4	50.8	56.6	49.1	48.6
USSR	86.0	109.8	83.8	75.0	65.0
E. Europe	30.7	31.5	34.1	29.5	29.4
India	26.4	24.7	22.1	25.8	25.8
All other foreign	75.6	70.3	74.5	75.2	76.3
Total foreign	279.9	321.8	301.4	290.3	281.2
USA	42.0	46.4	48.8	58.2	58.1
World total	339.9	368.2	350.2	348.5	339.3
Consumption: 4/ 5/					
USA	21.4	20.5	18.6	19.4	2/19.3
USSR 4/	99.6	100.2	89.2	89.0	82.0
PRC	36.9	35.8	36.9	34.7	34.7
All other foreign	203.9	206.5	207.7	211.4	209.4
World total	361.8	363.0	352.4	354.5	345.4
Stocks, ending: 6/					
World total	51.5	56.7	54.5	48.8	48.4

1/ Includes transshipments through Canadian ports; excludes products other than flour.

2/ U.S. trade and consumption projections for 1975/76 are midpoints of the official range estimates.

3/ Production data include all harvests occurring within the July-June year shown, except that small grain crops from the early harvesting Northern Hemisphere areas are "moved forward," i.e., the May 1975 harvests in areas such as India, North Africa, and southern United States are actually included in "1975/76" accounting period, which begins July 1, 1975.

4/ Consumption data are based on an aggregate of differing local marketing years. For countries for which stocks data are not available (excluding the USSR) consumption estimates represent "apparent" consumption, i.e., they are inclusive of annual stock level adjustments.

5/ Includes estimated waste due to excess moisture and foreign material.

6/ Stocks 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. Stocks data are not available for all countries and exclude those such as the People's Republic of China and parts of Eastern Europe; the world stock levels have been adjusted for estimated year-to-year changes in USSR grain stocks, but do not purport to include the entire absolute level of USSR stocks.

Table 18.--Wheat: World wheat supply and distribution, marketing years 1965-75 1/

Year	Area Harvested	Yield	Beginning Stocks 2/	Production	Total Exports	Consumption Total 3/
	Million Ha.	Qu./Ha.	- - - Million metric tons - - -			
1965/66	216.8	12.3	72.1	265.8	61.6	284.6
1966/67	214.8	14.3	53.3	307.5	58.0	282.7
1967/68	219.4	13.5	78.1	295.8	53.2	292.0
1968/69	224.7	14.6	81.9	328.4	50.0	303.2
1969/70	217.7	14.2	107.1	309.5	55.5	322.8
1970/71	206.0	15.2	93.8	313.8	56.3	335.3
1971/72	211.6	16.4	72.3	346.2	57.8	345.1
1972/73	209.0	16.3	73.4	339.9	72.2	361.8
1973/74	216.0	17.0	51.5	368.2	70.1	363.0
1974/75 4/	219.8	15.9	56.7	350.2	68.0	352.4
1975/76 5/	224.2	15.2	54.5	339.3	76.1	345.4

1/ Data in this table are based on an aggregate of differing local marketing years, and will therefore differ from July-June data appearing elsewhere in this report.

2/ Stocks data are only for selected countries and exclude such important countries as USSR, the People's Republic of China, and part of Eastern Europe for which stocks data are not available; the aggregate stocks levels have, however, been adjusted for estimated year-to-year changes in USSR grain stocks.

3/ For countries for which stock data are not available, or for which no adjustments have been made for year-to-year changes, consumption estimates assume a constant stock level.

4/ Preliminary.

5/ Projected.

Source: Foreign Agricultural Service

Table 19.--Wheat: World wheat and flour trade (grain equivalent), year beginning July, 1966-75 1/

Region and country	1966	1967	1968	1969	1970	1971	1972	1973	1974 Prel.	Proj. 1975
	- - - Million metric tons - - -									
Exports										
Canada	14.8	8.9	8.7	9.0	12.6	15.8	15.6	11.7	11.2	13.0
Australia	6.9	7.0	5.4	7.4	9.5	8.7	5.6	5.4	8.2	8.7
Argentina	3.1	1.4	2.7	2.1	1.6	1.3	3.4	1.1	2.2	3.5
Sub-total	24.8	17.3	16.8	18.5	23.7	25.8	24.6	18.2	21.6	25.2
West Europe	5.8	7.7	9.3	11.1	6.5	8.7	12.2	12.3	12.9	12.2
East Europe	1.7	2.3	2.0	1.3	.9	.9	.9	1.4	1.2	0.9
USSR	4.4	5.3	5.8	6.4	7.2	5.8	1.3	5.0	4.0	0.5
Other	.7	.7	.6	.8	.4	.6	1.9	.7	0.3	0.5
Total non-U.S.	37.4	33.3	34.5	38.1	38.7	41.8	40.9	37.6	40.0	39.3
United States	20.0	20.2	14.7	16.5	19.8	16.9	31.8	31.1	28.0	36.5
Total	57.4	53.5	49.2	54.6	58.5	58.7	72.7	68.7	68.0	75.8
Imports										
Japan	4.3	4.0	4.2	4.4	4.8	5.0	5.5	5.4	5.4	5.7
West Europe	10.9	10.3	12.8	12.7	13.7	12.1	13.5	12.8	10.7	11.7
East Europe	5.4	4.9	4.3	4.7	6.7	5.2	4.6	5.3	4.6	4.6
USSR	3.1	1.5	.2	1.1	.5	3.4	14.9	4.4	2.5	14.0
China, People's Rep. of	5.0	4.2	3.5	5.1	3.7	3.0	5.3	5.6	5.7	3.0
Sub-total	28.7	24.9	25.0	28.0	29.4	28.7	43.8	33.5	28.9	39.0
Africa 2/	6.0	5.6	3.7	3.8	5.2	5.4	5.2	6.9	6.9	7.7
Latin America 3/	4.6	5.1	4.3	3.9	3.9	4.4	6.2	6.2	5.4	5.9
West Asia 4/	2.0	1.7	1.8	2.4	2.8	4.6	2.0	3.3	5.3	3.6
South Asia 5/	9.1	9.3	5.4	5.4	4.4	4.8	5.8	7.5	10.8	9.9
Other Asia 6/	1.4	1.9	2.3	2.8	3.0	3.1	3.0	2.9	2.7	2.8
Others	5.6	5.0	6.7	8.3	9.8	7.7	6.7	8.4	8.0	6.9
Total	57.4	53.5	49.2	54.6	58.5	58.7	72.7	68.7	68.0	75.8

1/ Data include intra-EC-9 trade, but exclude products other than flour in grain equivalent; U.S. data also adjusted for transshipments through Canada.

2/ Algeria, Egypt, Libya, Morocco, Nigeria, South Africa, Sudan, and Tunisia.

3/ Mexico, Brazil, Chile, Colombia, Peru and Venezuela.

4/ Iran, Iraq, Israel, Jordan, Lebanon, Saudi Arabia, Syria and Turkey.

5/ Bangladesh, India, Indonesia, Pakistan, and Sri Lanka.

6/ Philippines, Taiwan, and South Korea.

Source: Foreign Agricultural Service.

Table 20.--Wheat: Rotterdam, c.i.f., quotations for cargoes/parcels
in nearest shipment position, by months, 1971-76

Year beginning	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Simple average
- - - - Dollars per bushel - - - -													
Canadian No. 1 CWRS - 14 - 1/													
1971	1.94	1.94	1.95	1.96	2.00	2.01	2.01	1.98	1.98	1.99	1.98	1.97	1.98
1972	1.97	1.99	2.54	2.73	2.76	2.87	3.15	3.14	3.12	3.18	3.30	3.90	2.89
1973	4.54	2/5.50	6.20	6.07	5.58	6.04	6.41	6.51	6.74	5.63	5.10	5.32	5.80
1974	5.78	5.75	5.77	6.44	6.43	6.31	5.67	5.41	4.96	5.24	5.08	5.26	5.68
1975	NQ	5.83	6.20	5.97	6.24	NQ	NQ						
United States No. 2 Hard Winter, 12%													
1971	1.80	1.77	1.76	1.74	1.79	1.76	1.76	1.74	1.75	1.76	1.77	1.76	1.76
1972	1.76	1.78	2.27	2.54	2.53	2.97	2.98	2.67	2.67	2.79	3.09	3.52	2.63
1973	3.97	5.24	5.48	5.27	5.45	6.25	6.26	6.32	6.12	5.00	4.64	3/4.82	5.40
1974	5.19	5.28	5.54	6.25	6.23	5.97	5.30	4.88	4.53	4.54	3.98	4.00	5.14
1975	4.70	5.13	5.30	5.14	4.78	4.56	4.57						
United States Dark Northern Spring, 15%													
1971	1.97	1.97	1.98	2.00	2.02	2.00	1.98	1.97	1.98	1.97	1.99	1.94	1.98
1972	1.93	1.97	2.33	2.52	2.50	2.87	3.18	2.97	2.80	2.90	3.23	4/3.58	2.73
1973	3.92	5.34	5.46	5.23	5.41	6.29	6.42	6.29	6.08	5.06	4.79	5.26	5.47
1974	5.68	5.53	5.63	6.34	6.36	6.20	5.55	5.24	4.80	4.84	4.58	4.51	5.44
1975	4.87	5.28	5.55	5.28	4.98	4.94	5.00						

1/ Prior to September 1971 Canada No. 2 Manitoba.

2/ Effective August 1973 - Canadian Western Spring Wheat (CWRS)--No. 1--13.5 protein.

3/ Effective June 1974, 13.5 percent.

4/ Effective June 1973, 14 percent.

NQ - Not quoted.

Compiled from Weekly Foreign Agriculture Magazine.

TABLE 21.--RYE: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1966-70 AVERAGE AND ANNUAL 1970-76

YEAR BEGINNING JULY 1	SUPPLY				DISAPPEARANCE							ENDING STOCKS JUNE 30						
	BEGIN- NING STOCKS	PRO- DUCTION	IMPORTS	TOTAL	DOMESTIC USE				EXPORTS	DI SAPPEAR- ANCE	TOTAL PRIVATELY HELD	GOVT. 2/	TOTAL					
					FOOD	SEED	INDUSTRY	FEED						FEED 1/	TOTAL			
1,000 BUSHELS																		
1966-70 (AVG.)	18,556	28,351	950	47,857	5,441	5,849	4,361	9,353	25,004	2,523	27,527	6,118	14,212	20,330				
1970/71	21,130	36,840	693	58,663	5,417	6,873	3,435	11,440	27,165	3,622	30,787	2,726	25,150	27,876				
1971/72	27,876	49,288	241	77,405	5,211	5,262	3,066	16,481	30,020	1,751	31,771	3,804	41,830	45,634				
1972/73	45,634	29,183	154	74,971	5,217	5,321	3,159	18,287	31,984	9,717	41,701	13,879	19,391	33,270				
1973/74	33,270	26,263	1	59,534	6,211	4,902	2,359	8,263	21,735	26,840	48,575	8,254	2,705	10,959				
1974/75 3/	10,959	19,293	277	30,529	5,372	4,500	1,362	9,549	20,783	3,956	24,739	5,761	29	5,790				
1975/76 4/	5,790	17,875	700	24,365	5,000	4,300	1,500	6,500	17,300	3,000	20,300	---	---	4,065				
ACREAGE																		
SEASONAL PRICES																		
				YIELD PER HARVESTED ACRE			RECEIVED BY FARMERS			MINNEAPOLIS, NO. 2		NATIONAL AVG. LOAN RATE						
				PLANTED			HARVESTED											
1,000 BUSHELS																		
BUSHELS																		
DOLLARS PER BUSHEL																		
1966-70 (AVG.)	3,844			1,211			23.4			1.03			1.16			1.02		
1970/71	4,196			1,427			25.8			.99			1.13			1.02		
1971/72	4,847			1,754			28.1			.90			1.00			.89		
1972/73	3,540			1,084			26.9			.96			1.11			.89		
1973/74	3,545			1,033			25.4			1.91			2.62			.89		
1974/75	3,200			897			21.5			2.51			2.88			.89		
1975/76 3/	3,166			814			22.0			2.32			---			.89		
1976/77 3/	3,031																	

1/ RESIDUAL; ROUGHLY APPROXIMATES TOTAL FEED USE. 2/ UNDER LOAN TO OR OWNED BY CCC. 3/ PRELIMINARY. 4/ FORECAST.

TABLE 22.--RYE: MARKETING YEAR SUPPLY AND DISAPPEARANCE, QUARTERLY, 1966-70 AVERAGE AND ANNUAL 1971-75

YEAR AND QUARTERS BEGINNING JULY 1	SUPPLY				DISAPPEARANCE							ENDING STOCKS JUNE 30
	BEGINNING STOCKS	PRO- DUCTION	IMPORTS	TOTAL	DOMESTIC USE					EXPORTS	TOTAL DISAPPEAR- ANCE	
					FOOD	SEED	INDUSTRY	FEED	TOTAL			
1,000 BUSHELS												
1966-70 (AVG.)												
JULY-SEPT.	18,556	28,351	202	47,109	1,412	2,691	850	3,904	8,857	610	9,467	37,642
OCT.-DEC.	37,642	---	349	37,991	1,423	2,691	1,167	2,302	7,583	333	7,916	30,075
JAN.-MAR.	30,075	---	85	30,160	1,388	292	1,331	1,570	4,581	369	4,950	25,210
APR.-JUNE	25,210	---	314	25,524	1,218	175	1,013	1,577	3,983	1,211	5,194	20,330
MKT. YEAR	18,556	28,351	950	47,857	5,441	5,849	4,361	9,353	25,004	2,523	27,527	20,330
1971/72												
JULY-SEPT.	27,876	49,288	131	77,295	1,380	2,421	544	6,576	10,921	1,604	12,525	64,770
OCT.-DEC.	64,770	---	110	64,880	1,363	2,420	816	5,518	10,117	143	10,260	54,620
JAN.-MAR.	54,620	---	---	54,620	1,334	263	997	2,690	5,284	4	5,288	49,332
APR.-JUNE	49,332	---	---	49,332	1,134	158	709	1,697	3,698	---	3,698	45,634
MKT. YEAR	27,876	49,288	241	77,405	5,211	5,262	3,066	16,481	30,020	1,751	31,771	45,634
1972/73												
JULY-SEPT.	45,634	29,183	154	74,971	1,178	2,448	353	9,049	13,028	17	13,045	61,926
OCT.-DEC.	61,926	---	---	61,926	1,225	2,447	780	3,328	7,780	174	7,954	53,972
JAN.-MAR.	53,972	---	---	53,972	1,314	266	993	1,460	4,033	1,174	5,207	48,765
APR.-JUNE	48,765	---	---	48,765	1,500	160	1,033	4,450	7,143	8,352	15,495	33,270
MKT. YEAR	45,634	29,183	154	74,971	5,217	5,321	3,159	18,287	31,984	9,717	41,701	33,270
1973/74												
JULY-SEPT.	33,270	26,263	---	59,533	1,537	2,255	449	6,358	10,599	12,116	22,715	36,818
OCT.-DEC.	36,818	---	---	36,818	1,599	2,255	624	996	5,474	9,911	15,385	21,433
JAN.-MAR.	21,433	---	1	21,434	1,654	245	712	785	3,396	142	3,538	17,896
APR.-JUNE	17,896	---	2/	17,896	1,421	147	574	124	2,266	4,671	6,937	10,959
MKT. YEAR	33,270	26,263	1	59,534	6,211	4,902	2,359	8,263	21,735	26,840	48,575	10,959
1974/75 3/												
JULY-SEPT.	10,959	19,293	18	30,270	1,426	2,070	218	4,089	7,803	1,731	9,534	20,736
OCT.-DEC.	20,736	---	5	20,741	1,404	2,070	383	2,668	6,525	2,198	8,723	12,018
JAN.-MAR.	12,018	---	---	12,018	1,320	225	349	1,925	3,819	1	3,820	8,198
APR.-JUNE	8,198	---	254	8,452	1,222	135	412	867	2,636	26	2,662	5,790
MKT. YEAR	10,959	19,293	277	30,529	5,372	4,500	1,362	9,549	20,783	3,956	24,739	5,790
975/76												
JULY-SEPT.	5,790	17,875	231	23,896	1,072	1,978	307	4,200	7,557	665	8,222	15,674
OCT.-DEC. 3/	15,674	---	227	15,901	1,090	1,978	675	2,186	5,929	304	6,233	9,668
JAN.-MAR.												
APR.-JUNE												
MKT. YEAR 4/	5,790	17,875	700	24,365	5,000	4,300	1,500	6,500	17,300	3,000	20,300	4,065

1/ RESIDUAL ITEM; ROUGHLY APPROXIMATES TOTAL FEED USE. 2/ LESS THAN 1,000 BUSHELS. 3/ PRELIMINARY. 4/ FORECAST.

Table 23.--Rye: Acreage, yield and production, United States, 1970-76

Year of harvest	Acreage seeded ^{1/}	Acreage harvested	Yield per harvested acre	Production
	1,000 acres	1,000 acres	Bushels	1,000 bushels
1970	4,196	1,427	25.8	36,840
1971	4,847	1,754	28.1	49,288
1972	3,540	1,084	26.9	29,183
1973	3,545	1,033	25.4	26,263
1974	3,200	897	21.5	19,293
1975	3,166	814	22.0	17,875
1976 ^{2/}	3,031			

^{1/} Seeded for all purposes in preceding fall.
^{2/} Preliminary.

Table 24.--Rye: Stocks, United States, by quarters, 1970-76

Year	January 1				April 1			
	On farms	Off farm	Commodity	Total	On farms	Off farm	Commodity	Total
		mills, elevators, and warehouses	and Credit Corporation			mills, elevators, and warehouses	and Credit Corporation	
		^{1/}	^{2/}	positions		^{1/}	^{2/}	positions
		1,000 bushels				1,000 bushels		
1970	10,610	18,316	413	29,339	7,321	16,568	413	24,302
1971	14,437	25,838	529	40,804	10,219	23,613	529	34,361
1972	21,505	32,662	453	54,620	17,174	31,736	422	49,332
1973	15,914	37,831	227	53,972	12,984	35,555	226	48,765
1974	7,793	13,440	200	21,433	4,440	13,321	135	17,896
1975 ^{3/}	6,509	5,509	---	12,018	4,118	4,080	---	8,198
1976 ^{3/}	5,735	3,933	---	9,668				
		July 1			October 1			
1970	2,797	17,912	421	21,130	20,313	27,300	529	48,142
1971	2,328	25,026	522	27,876	28,335	35,947	488	64,770
1972	11,543	33,748	343	45,634	21,294	40,378	254	61,926
1973	6,786	26,259	225	33,270	14,666	21,952	200	36,818
1974	2,745	8,198	16	10,959	11,855	8,881	---	20,736
1975 ^{3/}	2,849	2,941	---	5,790	10,020	5,654	---	15,674

^{1/} All off-farm storages not otherwise designated, including flour mills, terminal elevators and processing plants.

^{2/} Rye owned by CCC and stored in bins or other storage owned or controlled by CCC. Other rye owned by CCC as well as rye outstanding under loan is included in other positions.

^{3/} Preliminary.

Table 25. --Rye: Farm and cash prices, by selected States and markets, 1974-76

Item	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Season average 1/
-- -- Dollars per bushel -- --													
<u>Colorado</u>													
1974/75	1.97	2.42	2.58	2.60	2.69	2.65	2.51	2.57	2.15	2.15	2.15	1.99	2.46
1975/76	2.20	2.37	2.35	2.55	2.23	2.20	2.15						2.30
<u>Georgia</u>													
1974/75	2.60	2.70	2.65	2.70	2.70	2.75	2.70	2.60	2.60	2.55	2.50	2.45	2.62
1975/76	2.45	2.50	2.50	2.50	2.50	2.45	2.45						2.45
<u>Kansas</u>													
1974/75	1.80	2.14	2.30	2.28	2.26	2.18	2.05	2.04	2.06	2.04	2.08	2.10	2.03
1975/76	2.10	2.10	2.10	2.20	2.28	2.28	2.28						2.10
<u>Minnesota</u>													
1974/75	2.53	2.58	2.66	2.69	2.79	2.71	2.53	2.52	2.11	2.32	2.17	2.03	2.54
1975/76	2.15	2.52	2.60	2.57	2.34	2.23	2.37						2.35
<u>Nebraska</u>													
1974/75	1.95	2.28	2.53	2.62	2.64	2.35	2.28	2.06	2.06	2.12	2.10	1.98	2.20
1975/76	2.08	2.20	2.37	2.30	2.28	2.19	2.19						2.15
<u>North Dakota</u>													
1974/75	2.50	2.61	2.64	2.70	2.78	2.66	2.46	2.42	2.06	2.28	2.09	2.00	2.53
1975/76	2.12	2.39	2.56	2.48	2.22	2.11	2.24						2.25
<u>South Dakota</u>													
1974/75	2.45	2.50	2.60	2.63	2.70	2.64	2.48	2.38	2.12	2.34	2.17	1.99	2.48
1975/76	2.14	2.50	2.58	2.56	2.32	2.19	2.40						2.35
<u>U.S. average farm</u>													
1974/75	2.37	2.54	2.66	2.70	2.78	2.66	2.50	2.38	2.11	2.31	2.14	2.19	2.51
1975/76	2.26	2.44	2.54	2.52	2.34	2.21	2.33						2.32
<u>Minneapolis No. 2</u>													
1974/75	2.97	2.89	3.07	3.25	3.19	3.05	2.93	2.80	2.56	2.72	2.70	2.49	2.88
1975/76	2.58	3.04	3.03	3.01	2.86	2.73	2.82						
<u>Winnipeg No. 3</u>													
<u>Canadian Western</u>													
1974/75	3.04	2.83	2.90	3.34	3.11	2.91	2.72	2.40	2.10	2.13	2.07	2.08	2.64
1975/76	2.28	2.94	3.02	2.60	2.33	2.25							

1/ Includes allowance for loans outstanding and purchases by the Government valued at the average loan and purchase rate. Simple average for Minneapolis No. 2 and Winnipeg No. 3.

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Stocks

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CCC Price Support operations, historical	May, August
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Prices

Farm and cash prices, by selected States and markets	All issues
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WASHINGTON, D.C. 20250

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WS-235

FEBRUARY 1976

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