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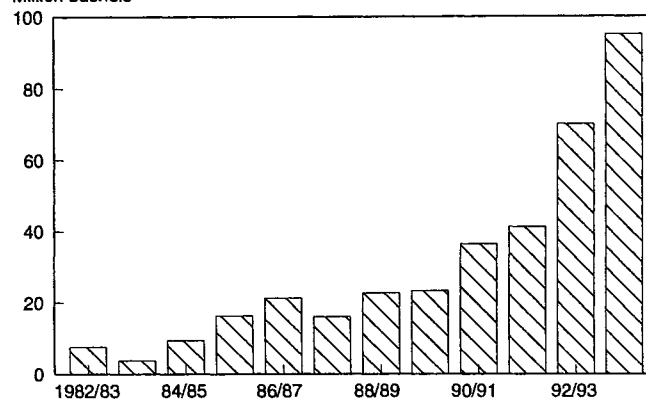
WHS-305
February 1994

Wheat

Situation and Outlook Report

U.S. Wheat Imports Up

Million bushels



Includes grain and products. 1993/94 forecast.

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Summary

Winter Wheat Seedings Down 2 Percent for 1994

U.S. winter wheat producers have planted 2 percent less than a year earlier, despite 3 years of season-average farm prices over \$3.00 per bushel and 2 years with a zero percent ARP. The first USDA estimate for 1994 winter wheat plantings was released in early January and showed seedings estimated at 50.6 million acres, down 1.1 million acres from 1993. This is the smallest planted area since the 48.8 million acres in 1988.

At fall planting time, winter wheat prices were little changed from a year earlier and the ARP requirement remained at zero percent. While these two factors were not a strong incentive for larger area, many analysts had expected some increases because weather problems had lowered seedings in fall 1992. However, in the fall of 1993, weather was again a problem, ranging from prolonged rain in parts of the Midwest to very dry in parts of the Southern Plains.

The annual U.S. wheat farm price is forecast at \$3.10 to \$3.25 per bushel, versus \$3.24 in 1992/93. Compared to 1992/93, monthly wheat prices started lower, but moved higher in the winter and are likely to remain there because of tightening supplies and high feed grain prices. A significant decline in wheat prices compared to corn prices would encourage wheat feeding and, with ending stocks already forecast fairly low, it is unlikely that much wheat will be fed until 1994 production prospects are clearer.

Global trade in 1993/94 is projected at 100 million tons, down 9 percent from 1992/93. Declines in forecast imports by the FSU, China, and South Asia account for much of this change. Although prices are high for durum and higher protein wheats, in general, export prices remain well below those of a year ago. Then imports by the FSU, India, Pakistan, and North African countries coincided with reduced milling quality wheat from Australia and Canada, helping boost prices, especially during the last half of the marketing year. Prices for lower protein wheat have been softening since the end of December. Wheat for feeding remains very competitively priced with corn because of tight U.S. feed grain supplies.

U.S. durum prices are the highest since 1988, not only in reaction to tight U.S. supplies, but also because foreign exportable supplies are low, prices high, and import demand strong. EU supplies are unusually tight as plantings have been cut in response to CAP reform. Although Canada's durum production is up from a year ago, stocks were down. Because of weather problems, quality durum is particularly scarce. Tight world durum supplies are expected to continue in 1994/95, although the higher prices will lead to larger plantings.

President Clinton has directed the International Trade Commission (ITC) to initiate an investigation of wheat imports under Section 22. Upon receipt of the ITC report, the President can impose fees and/or tariffs.

THE WHEAT SITUATION AT A GLANCE

All wheat: Supply and disappearance 1/						Wheat by class: Supply and disappearance 1/						
Year beginning June 1	1989/90	1990/91	1991/92	1992/93 2/	1993/94 3/	Year beginning June 1	Hard red winter	Hard red spring	soft red winter	White	Durum	Total
Million bushels						Million bushels						
Beginning stocks	702	536	866	472	529	1992/93: 2/ Beginning stocks	194	128	41	54	55	472
Production	2,037	2,736	1,981	2,459	2,402	Production	966	702	427	266	97	2,459
Imports	23	36	41	70	95	Supply, total 4/	1,161	864	468	329	179	3,001
Supply, total	2,762	3,309	2,888	3,001	3,026	Domestic disappear.	493	256	216	70	83	1,118
Domestic						Exports	464	438	210	195	47	1,354
Food	749	785	789	829	840	Disappear., total	957	694	426	265	130	2,472
Seed	105	93	98	98	98	Ending stocks	204	170	43	64	49	529
Feed & residual	140	496	250	191	275	1993/94: 3/ Beginning stocks	204	170	43	64	49	529
Domestic, total	993	1,375	1,137	1,118	1,213	Production	1,073	510	403	347	69	2,402
Exports	1,232	1,068	1,280	1,354	1,225	Supply, total 4/	1,278	736	445	419	148	3,026
Disappearance, total	2,225	2,443	2,416	2,472	2,438	Domestic disappear.	523	282	225	108	77	1,213
Ending stocks	536	866	472	529	588	Exports	475	275	185	240	50	1,225
						Disappear., total	998	557	410	348	127	2,438
						Ending stocks	281	179	36	72	21	588

1/ Includes flour and products in wheat equivalent. 2/ Estimated. 3/ Projected. 4/ Includes imports. Totals might not add because of rounding.

U.S. Winter Wheat Seedings Down 2 Percent for 1994

Despite 3 years of season average farm prices over \$3.00 per bushel and 2 years with a zero percent Acreage Reduction Program (ARP), winter wheat producers are planting 2 percent less for 1994. Weather conditions hampered some plantings again this year.

Winter Wheat Seedings Down Slightly

The first USDA estimate for 1994 winter wheat plantings was released in early January, and showed that seedings were estimated at 50.6 million acres, down 1.1 million acres or 2 percent, from 1993. This is the smallest planted area since the 48.8 million acres in 1988, when the ARP was 27.5 percent.

At fall planting time, winter wheat prices were little changed from a year earlier and the ARP requirement remained at zero percent. While these two factors were not a strong incentive for larger area, many analysts had expected some increases because weather problems had lowered seedings in the fall of 1992. However, weather was again a problem in the fall of 1993, ranging from prolonged rain in parts of the Midwest to very dry in parts of the Southern Plains. So, by the time USDA released the planting estimate, most analysts had cut their forecasts from earlier expectations. The 1994 estimate was below the average of industry analysts, but fell within the range of their prerelease estimates. The industry estimate averaged 51.7 million acres, with a range from 50 to 52 million.

Drop in Texas Offset by Increases in Kansas and Oklahoma

Area seeded in the seven largest producing States, representing nearly 70 percent of the total, is down a net 500,000 acres from 1993. Changes in the Southern Plains were gen-

erally offsetting. Area in Kansas, generally the largest wheat producing State, is estimated at 12.2 million acres, up 100,000 acres from 1993 and the highest since 1990 when 12.4 million acres were planted. Area in Oklahoma, estimated at 7.4 million acres, is up 200,000 from 1993, while area in Texas decreased 300,000 to 5.8 million acres, the lowest since 1974. In Colorado, area increased by 100,000 to 2.9 million acres. The three remaining States, while planting more than 2 million acres, seeded less area in 1994 than in 1993. Farmers in Nebraska, Montana, and Washington planted a total of 600,000 less than in 1993, an 8 percent decrease.

Plantings were up across much of the Southeast and Atlantic States. In Georgia, North Carolina, and South Carolina plantings were up a combined 240,000 acres from 1993. In the Corn Belt and Midwest, conditions and plantings were mixed. In Ohio and Indiana, area was estimated at 1.15 million acres and 750,000 acres, up 100,000 and 30,000, respectively. However, in Missouri and Illinois seedings were estimated down a total of 850,000 acres, or a 26 percent decrease.

Weather and Economics Send Different Signals about Seedings

Economic incentives and weather conditions at planting decision time strongly affected plantings in the fall of 1993. The ARP requirement remained at zero percent and was a less significant factor affecting seedings.

Figure 1
Winter Wheat Area Planted Stable Since 1991

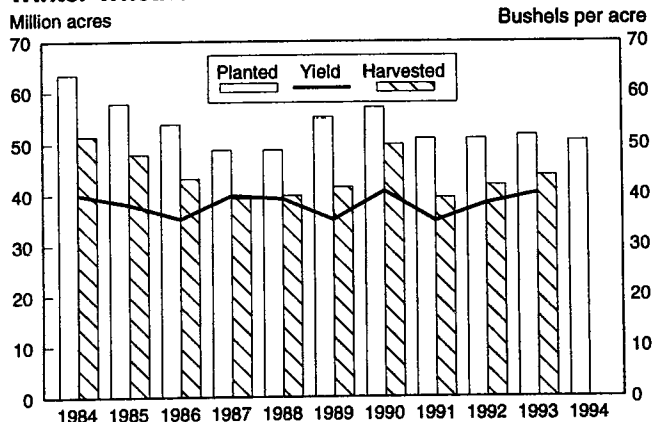


Figure 2
Changes in Winter Wheat Area from 1993 1/

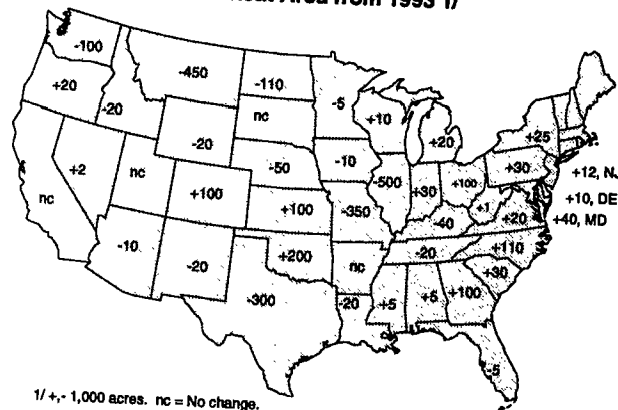
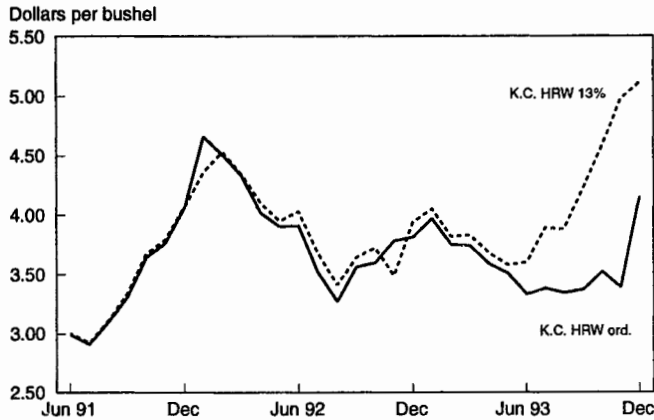


Figure 3
HRW Premiums Increase for 13 Percent Protein



Nationally, price incentives did not appear strong enough to pull in additional wheat acres. In the late summer and early fall national-average farm prices for wheat were below 1992 levels. At the same time, KCBT futures for July 1994 contracts ranged between \$3.00 and \$3.10 per bushel. However, large protein premiums resulting from a poor quality 1993/94 crop may have encouraged plantings in several States. Between July and October, the protein premium for K.C. hard red winter 13 percent protein over ordinary protein averaged more than \$.70 per bushel, which compares to \$.13 per bushel for the same time a year earlier.

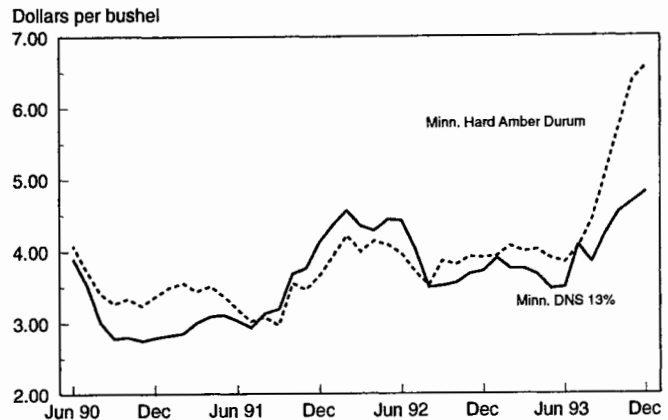
Weather and soil moisture conditions varied at planting time. While some States in the Midwest and Northern Plains had excessive rain and cool temperatures, the Southeast experienced one of the driest and hottest summers of the century. As the window for planting winter wheat closed, some areas of Illinois and Missouri received excessive rain and plantings were not done or were delayed.

Despite local delays, national plantings through the beginning of October lagged 1992 plantings only slightly. Plantings in Kansas, Oklahoma, Texas, and Colorado progressed favorably compared to 1993 and the 5-year average. During the first full week of October, national plantings equaled both last year and the 5-year average, going from 55 to 72 percent complete. Throughout the remainder of the fall, plantings progressed at the same rate as last year and the previous 5-year average. Despite some delayed plantings, emergence duplicated last year and the 5-year average. When the last crop condition was compiled in late November, 15 percent was rated as excellent, 54 percent good, and 27 percent fair. This compares with 17 percent excellent, 48 percent good, and 30 percent fair for 1993.

Supply Largely Depends on Yields

The 1994/95 crop year is forecast to have 588 million bushels of carryin stocks. This is up 59 million bushels from 1993/94, but is little changed from the average of 617 million bushels since 1989/90. Since winter wheat seeded area is little changed, harvested area and yields will be the main determinants of winter wheat supplies. Durum and spring wheats, accounting for 28 percent of wheat area in 1993, have not yet

Figure 4
Durum Price Increases Over HRS



been planted, but will also be critical in determining 1994/95 supplies.

Although wheat area in Texas is estimated down, larger plantings were seen in Kansas, Oklahoma, and Colorado. Some of these plantings have already been used to graze cattle, as USDA's seeding estimate includes wheat planted for pasture or hay. Also, the wheat harvest for grain may prove to be a very important supply of grain for feeding as corn supplies will be tightest in the months leading up to the new corn crop harvested next fall.

Winter Wheat Seedings of SRW Drop

Disaggregation into the three classes of winter wheat reveals a significant reduction in soft red winter area. Soft red winter area, which is primarily in States along or east of the Mississippi River, was estimated at 10.3 million acres, down almost 500,000 acres from 1993, a 4.5 percent decrease. Several soft red winter producing States along the Mississippi River had extreme wetness and field work was prevented or delayed. States further east generally increased SRW plantings. However, plantings for 1994 continue the downward trend of soft red winter area since 1989 and is the lowest since 1987. Where wheat plantings were prevented by floods and excess moisture in autumn 1993, the land may be planted to corn or soybeans in the spring of 1994.

Hard red winter area, accounting for the majority of both winter wheat and all wheat acreage, is estimated at 35.8 million acres, down 590,000 acres or 1.6 percent from 1993. However, since 1987, HRW area planted has averaged only slightly more at 36.3 million acres, ranging from 34.4 to 38 million acres.

White winter wheat is the smallest class of winter wheat, usually ranging between 4 and 5 million acres annually. The 1994 estimate of 4.5 million acres is down slightly from 4.6 million in 1993, but up from the 4.3 planted in 1992.

Spring Wheat Area Prospects Unclear for 1994

Spring wheat area in 1994 will be influenced by winter wheat seedings and prices. Winter wheat area in spring wheat producing States is down more than 573,000 acres. The largest

decreases were in North Dakota, down 110,000 acres; Montana down 450,000; and Washington, down 100,000. Those acres not planted to winter wheat could be planted to spring wheat. Lower winter wheat seedings boosts price prospects and could result in increased spring wheat plantings. However, scab problems in 1993 may result in increased fallow or rotation into a non-host crop.

A poor quality spring wheat and durum crop in 1993/94 has resulted in relatively high price premiums for spring wheat, especially for higher proteins with little scab damage. With total winter wheat seedings down in the Northern Plains and Pacific Northwest, it is likely there will be increased acreage of spring crops. This spring it is likely relative price will draw acres from barley into spring wheat and durum. However, increased competition with minor oilseeds is expected, especially in parts of North Dakota. Some of the scab affected areas may be planted to minor oilseed crops.

Major Provisions of the 1994 Wheat Program Announced

The Commodity Credit Corporation (CCC) has already announced that the level of the Acreage Reduction Program (ARP) for 1994 wheat will be 0 percent and that the target price for 1994 wheat will be \$4.00 per bushel--the same as in 1993. The other major 1994 wheat program provision previously announced is the change in the price from which regular deficiency payments are calculated. The CCC is legally required to use the lower of (a) the 12-month price and (b) the 5-month price plus 10 cents. This is instead of the 5-month price (the price received by producers during the first 5 months of the marketing year) used previously.

On February 18, 1994, CCC announced additional provisions affecting the 1994 wheat program. The projected deficiency payment rate for 1994 wheat is \$0.85 per bushel. This rate is a guaranteed rate for producers participating in the 0/85/92 program and is the basis for advance deficiency payments. The percentage of the projected rate to be advanced at signup will be announced later. By statute the rate cannot be less than 40 percent nor more than 50 percent for wheat and feed grains. The loan rate for 1994 wheat will be \$2.58 per bushel.

Other program provisions announced on February 18 affecting all program crops, including wheat are:

Program signup will be March 1, 1994, through April 29, 1994.

Crops that can be planted on 1994 flexible acreage will be the same as in 1993 where all crops except fruits, vegetables, peanuts, tobacco, wild rice, trees, tree crops, and nuts could be planted.

The Target Option Program (TOP) will not be implemented for 1994. TOP has not previously been implemented.

Industrial and Other Crops On 0/85/92

Because of new statutory requirements, previous years' 0/92 program will be a 0/85/92 program beginning in 1994. The standard program will be a 0/85 program. Producers who want to participate in the 0/85 program will have to idle (or plant to selected crops), 15 percent of their maximum payment acres without payment to be eligible for guaranteed deficiency payments on additional acres idled or planted to selected crops. (Under the 0/92 program, only 8 percent of producers' maximum payment acres had to be idled or planted to selected crops without payment to be eligible for 0/92 deficiency payments.)

Producers who meet certain criteria may receive payments in 1994 as though a 0/92 program continues to be in effect. The exceptions to the standard program which allow a 0/92 program are: planting minor oilseeds, sesame, crambe, and "industrial and other crops;" being prevented from planting; and having reduced yields on failed acres because of a natural disaster. Producers wishing to use these exceptions to qualify for 0/92 should contact their local ASCS office for more details.

The allowed planting of industrial and other crops on 0/85/92 acres is new for 1994 and represents the exercise of discretionary authority. According to the CCC press release, "the use of this discretionary authority will provide potentially new markets and income opportunities for producers without competing with traditional commodities for feed or food use."

The 12 allowed crops (and their potential uses) are castor beans (lubricants, nylon); chia (cosmetics), crotalari (burlap type fibers); cuphea (soap surficants); guar (cloth, paper manufacturing, explosives); guayale (hypoallergenic latex products); hesperaloe (specialty paper pulp); kenaf (twine, rope, molded car parts, burlap, newsprint); lesquerella (lubricants, cosmetics); meadowfoam (lubricants, waxes, water repellents, leather manufacturing); mildweed (clothing, insulation, tissue paper); and plantago ovato (high fiber additive to laxatives).

These 12 industrial crops plus sesame and crambe may also be planted on acres idled to meet ARP requirements under the upland cotton program. Upland cotton is the only program crop with an ARP greater than 0 percent for 1994. Planting of these crops on upland cotton ARP acres will not result in any reduction in deficiency payments.

Foreign Winter Wheat Conditions Mixed

Mixed weather conditions, decreased area in the FSU and changing policies in several countries create uncertainty.

USDA will make its first forecast for 1994/95 in May, but it is not too early to discuss the weather conditions affecting the winter wheat crops in the Northern Hemisphere, economic influences on spring wheat production in the Northern Hemisphere, and 1994/95 production in the Southern Hemisphere.

The recent GATT agreement is not expected to have much influence on 1994/95 production. The Northern Hemisphere winter wheat crop was already planted by the time the agreement was reached. Also, the trade environment is not expected to change substantially by the time Southern Hemisphere producers plant their crops in the coming months.

In the EU (European Union, formerly known as the EC), adequate moisture favored winter wheat planting, germination, and establishment, although some areas suffered from prolonged wet conditions at planting. However, Greece suffered from drought in the autumn, delaying planting, reducing total area planted to wheat, and possibly affecting yields. November was unusually cold across the region, but an unseasonably mild winter prevailed into early February. There has also been flooding in the United Kingdom, southern France, Italy's Po Valley, and northern Germany. While the overall impact will not be known for several weeks, areas that did not get planted last fall are likely to be replanted to barley in the spring.

Similar to last year, large producers will be required to set land aside to receive compensatory payments. In general, relative returns continue to favor wheat over barley. More milling wheat varieties are thought to have been planted because feed wheat prices have dropped more than overall grain prices. This has occurred because feed wheat is no longer allowed into intervention stocks.

Last year Scotland and the former East Germany did not set aside enough land and could have been required to reduce area by an even greater percentage. However, the prescribed penalty was reduced by 90 percent for 1994 and little change in area planted to wheat is likely. While Scotland received a one time penalty reduction, the penalty on East Germany will be phased in over a four year period.

EU durum production in 1994/95 is likely to remain constrained. In 1993/94, reforms of the Common Agricultural Policy (CAP) reform limited the EU's supplemental durum subsidy to "traditional" areas. As a result, EU durum area fell 12 percent from 1992/93 and production dropped 25 percent. Little change in planted area is expected for 1994/95.

In East Europe, temperatures have generally been above normal, except for a cold weather in November and early February. Precipitation was favorable in the northeast, although planting in southeastern Europe was delayed because of dry

weather. In Poland, low prices at planting may have discouraged producers from planting as much wheat as in 1993/94. In Bulgaria, uncertainty regarding land tenure and continued financial distress likely resulted in reduced wheat area. However, producers in Hungary, the Czech and Slovak Republics, and Romania likely planted more wheat because of high prices at planting time.

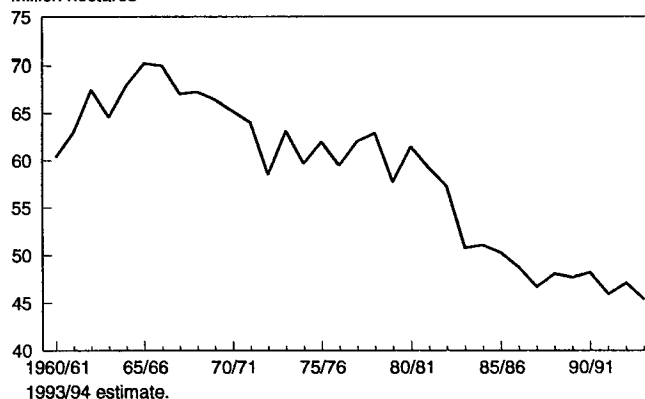
Winter grain area in Russia is down 20 percent from 1992's low level. Cold, wet weather in autumn delayed the spring crop harvest and winter grains planting, while dryness in the North Caucasus likely constrained crop germination and establishment. Winter conditions have been generally favorable although extremely cold temperatures in November may have caused some winterkill. Adequate snow cover likely protected the crop during another very cold snap in February.

Purchases of fertilizers in Russia are down more than 25 percent from 1992. However, producers may have stored supplies from previous years and are likely using them more efficiently than in the past, so it remains unclear how yields will be affected. In 1992 and 1993, yields have been average to above average despite reduced input use. While winter grain production is likely to fall in Russia, it is possible that spring grains could make up for much of the shortfall.

This year, however, with less winter area sown and reduced input use, weather conditions in the spring will have to be very favorable for producers to make up for the drop in winter grain seedings, especially since winter grains are higher yielding. Even if spring planting weather is favorable, questions still remain about producers' ability to purchase and apply fertilizer.

Agricultural policies in Russia are shifting rapidly. In December, President Yeltsin signed a decree intended to partially

Figure 5
FSU Wheat Area
Million hectares



liberalize the grain market and reduce State support to agriculture, particularly to the livestock sector. These changes would have started serious reforms in Russia's grain market by reducing central State grain procurements, outlawing attempts by local governments to restrict grain trade, and by mandating that State procurements be made at market prices.

However, the new government appears to be setting a course aimed at slowing agricultural reforms by proposing to increase subsidies and credits to agriculture and by slowing the pace of market liberalization. There are also reports that the new government may seek to reintroduce price controls as a means to slow inflation. However, the government has not indicated how it will pay for these proposals.

The new government has also proposed programs to pay off State arrears owed to farms and food processors. Another proposed program would include support for agriculture through subsidized credit. However, as of mid-February, the budget has not yet been approved and implementation of these proposals remains highly uncertain.

It is unclear how these proposals will affect producers' decisions about plantings and marketing. While the policy shift, if implemented, could mean more subsidies, inflation could wipe out any real gains. Also, it is questionable whether the policy changes would lead to greater purchases of input supplies.

If implemented, the new policies could contribute to greater inflation, thereby reducing farmers' willingness to sell grain to the State. If the value of the ruble continues to decline, producers may prefer to increase their holding of grain supplies to use in barter transactions. If State procurements fall sharply, one of the possible outcomes could be that distribution channels would be interrupted. If distribution channels were to be disrupted, urban shortages might result and waste throughout the distribution system might increase. The government might then be forced to increase imports, despite reluctance to spend foreign exchange or use exporter credit for food imports.

Ukraine's winter grain area is estimated to be up 5 percent from last year. However, in some parts of the country, the

crop was planted in very dry soils and cold temperatures in November and mid-February may have caused substantial winterkill. During a recent visit to Washington, Ukrainian officials indicated that a significant portion of the sown area did not germinate and some area suffered from winterkill. News reports also indicate extensive damage.

In China, planting conditions were favorable as were conditions during the early winter months, although recent warm temperatures have reduced winter hardiness. Of course, with a country this large, there are always some problem areas. Producers still face political pressure to maintain or increase food grain production. Also, prices were up slightly at planting from a year earlier. In November, the government announced that procurement prices for wheat would increase in April in an effort to narrow the gap between urban and rural incomes. The government also announced new policies to increase stockholding to alleviate price fluctuations. While the announcements may be affecting the way producers are marketing 1993/94 grain crops, the new policies came too late to influence producers' wheat planting decisions.

Good planting conditions and higher support prices were favorable for wheat planting in India. Adequate irrigation supplies will benefit the crop in the spring.

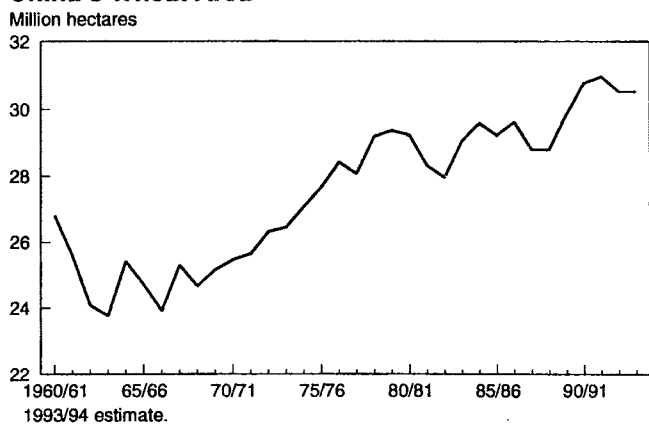
Winter wheat conditions in North Africa are mixed. Planting conditions were favorable in Morocco and western Algeria. Precipitation since then has been below normal and subsoil moisture is limited. Thus, timely rains in March and April are critical. Dry weather delayed planting in eastern Algeria and Tunisia. It is uncertain how much of the crop actually was planted because the region continued to receive below normal precipitation through January. Like the western region, rain in March and April is critical.

Turkey experienced dry autumn weather, delaying planting and adversely affecting crop germination and establishment. Although conditions have recently improved in Anatolia and the southeast, rainfall remains below normal. Like North Africa, rain in March and April is critical. Dry conditions are also affecting crops in other parts of the Middle East. Therefore, it is unlikely that production in this region will be as abundant as in 1993/94.

While Canadian producers will not begin planting their 1993/94 crop until April or May, Agriculture Canada is projecting that hard red spring wheat area will fall slightly (2.5 percent) from 1993/94 because of lower prices stemming from continued large stocks and sharp competition in the world market. Durum production, however, is projected up 13 percent, stimulated by very high prices and tight world supplies. Agriculture Canada is projecting 1994/95 total wheat production at 24.8 million tons, down 11 percent from 1993/94.

Australian producers will also begin planting in April. The Australian Bureau of Agriculture and Resource Economics (ABARE) is forecasting a 6 percent increase in area, but a smaller crop of 15.5 million tons as yields are forecast to return to average. In contrast, the Australian Wheat Board is projecting higher area and production of 17.5 million tons. Both organizations are projecting that farmers will be encour-

Figure 6
China's Wheat Area



aged to expand area because of this year's improved returns from wheat relative to wool and other crops.

There are no early forecasts for Argentina available. Like Australian producers, Argentine farmers will begin planting their 1993/94 crop in April. Farmers continue to face economic uncertainty and are dissatisfied with government sup-

port measures. However, prospects of increasing imports by Brazil and higher prices in 1993/94 compared to 1992/93, a result of quality concerns, may encourage producers to expand production. However, increased competition for Latin American markets in 1993/94 could leave Argentina with increased stocks overhanging the market and reducing domestic prices, thereby discouraging expansion.

1993/94 Situation and Outlook

World Trade Forecast Down

Global trade is projected at 100 million tons, down 9 percent from 1992/93. Declines in the Former Soviet Union (FSU), China, and South Asia account for much of this change.

Global production for 1993/94, at 562 million tons, is up marginally from 1992/93. Consumption is projected up substantially to 561 million tons, but still marginally below production, leading to a small rise in global ending stocks. The stocks-to-use ratio, however, is forecast down at 25.6 percent.

Although prices are high for durum and higher protein wheats, in general, export prices remain well below that of a year ago. Last year, increased imports by the former Soviet Union (FSU), India, Pakistan, and North African countries coincided with reduced availability of milling quality wheat from Australia and Canada. This boosted prices, especially during the last half of the marketing year. While durum and high protein wheat remain in short supply and their prices have risen sharply during the marketing year, prices for lower protein wheat have been softening since the end of December. Wheat for feeding remains very competitively priced with corn because of tight U.S. feed grain supplies.

FSU Wheat Imports Sink Lower; China's Imports Remain Low

FSU wheat production is estimated at 87 million tons, down 3 percent from 1992/93. Despite reduced production, 1993/94 imports are projected down one-third from 1992/93 to 15.7 million tons, and only about half is likely to come from countries outside the FSU.

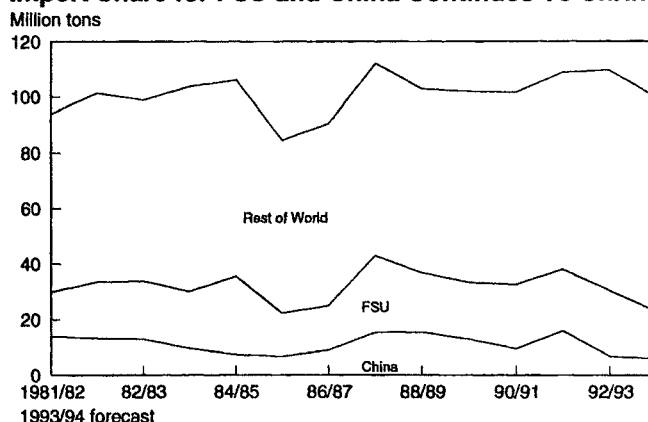
State procurements have been relatively stable and FSU consumption is forecast down 6 percent, with the largest decline in Russia. Feed use in Russia is forecast down 14 percent as the livestock sector continues to contract and producers substitute fodder for grains in feed rations. Other uses have also declined since the Russian government removed many subsidies (including those for bread), thereby reducing waste and lowering consumer demand for many food products.

Imports by Russia are projected at 7.3 million tons, down nearly 50 percent from 1992/93. While Russia continues to make payments on its credit obligations to the United States, the EU, and Canada, as of mid-February it has not requested additional credit from major exporters to buy grain. Government officials have repeatedly voiced their reluctance to use credit to purchase grain, claiming that if additional grain is needed, it will buy without credit.

Other FSU countries, have been importing grain from third countries with exporter assistance, including food aid. Uzbekistan has been the largest commercial purchaser, mostly using barter arrangements.

China's wheat production is estimated at 105 million tons, up 3 percent from 1992/93. The larger crop and policy changes are contributing to the continued decline in imports. China's imports are forecast at 6 million tons, down 10 percent from 1992/93. China has reportedly purchased over 5 million tons

Figure 7
Import Share for FSU and China Continues To Shrink



between July and February. China appeared to have been largely absent from the import market during the autumn, after purchasing nearly 800,000 tons from the United States in July. Then, in January, China bought 2 million to 2.5 million tons from the United States, Australia, and Canada for delivery between January and March.

One reason for China's return to the international market is that in November, China's government announced that grain procurement prices would rise in April. Meanwhile, wheat prices in selected large urban areas have risen rapidly, raising fears that shortages might occur even in a year of record grain harvests. Some producers may be waiting to market wheat remaining on-farm until prices rise. When they do, it is likely that additional domestic supplies will become available.

Wheat production in Eastern Europe is estimated up 15 percent from 1992/93. Dry weather in Slovakia, Hungary, and Bulgaria, combined with reduced input use across the region, led to reduced yields from a year ago. However, more area was harvested and growing conditions in several countries were more favorable than in 1992/93. Imports are projected at 2.4 million tons, down 32 percent from 1992/93. Some of this wheat will likely be used for feed because the dry conditions affected spring feed grain crops more than the winter wheat.

Developing Country Imports Support Volume of World Trade

Despite the decline in imports by the FSU and China, strong imports by North Africa, several Asian countries, and others (including Nigeria, Mexico, and Yemen) have kept the forecast of global imports from falling more than the projected 9 percent decline. In addition, South Korea continues to import large volumes of wheat for feeding, keeping the volume of wheat trade from falling further. However, strong sales to these countries are not enough to offset the forecast declines in the FSU, China, East Europe, India, and Pakistan.

The 2 years of drought in Morocco and this year's drought-affected crop in Algeria boosted import needs in North Africa. Imports by Morocco and Algeria are forecast at 3.5 million and 4.3 million tons, respectively, up 9 and 13 percent from 1992/93. Egypt's imports are forecast at 5.5 million tons, down 8 percent from 1992/93. Egypt harvested another record crop. In addition, Egypt imported a large volume of flour towards the end of the 1992/93 marketing year and the resulting beginning stocks reduced import needs at the start of the current year.

Although large crops reduced import needs in several Middle Eastern countries (including Iran and Syria), imports by several other Middle Eastern countries are forecast to increase. Yemen, for example is forecast to expand imports 38 percent from 1992/93 to 2.2 million tons of wheat, about half of it from the United States and much of it in the form of flour. Iraq's imports are forecast to double to 1 million tons, although this is well below pre-Gulf War volumes.

In South Asia, India and Pakistan both harvested record crops, and unlike last year, both governments have been able to buy supplies from producers at prices competitive with the private sector, thereby securing adequate stocks. In India's case, imports are projected to drop from 3 million tons in 1992/93 to 100,000 tons in 1993/94. India is reportedly trying to sell durum wheat into the international market, but it is not clear if India can separate out its durum supplies from other wheat varieties and may have to wait until the 1994 crop is harvested in April/May.

Pakistan's imports are forecast down more than 1 million tons to 1.7 million tons. Like India, the Pakistani government procured enough wheat to build stocks. In addition, the removal of import subsidies discouraged private sector imports.

In Latin America, imports are forecast up slightly from 1992/93, mostly because of increased imports by Brazil and Mexico. Brazil's wheat production is estimated at 2.1 million tons, down 25 percent from 1992/93. Area remained low because of the lack of economic incentives to plant. In addition, the crop suffered from frost damage and yields fell. Brazil's imports are forecast at 5.9 million tons, up slightly from 1992/93. Increased volumes are expected to be imported from Canada and the EU because of early concerns regarding the size and quality of Argentina's crop. However, those concerns were somewhat alleviated as the Argentine harvest progressed and the quality of much of the wheat was found to be adequate. Still, Brazil is likely to import 2 million to 3 million tons from countries other than Argentina.

Mexico is forecast to import 1.7 million tons, up 21 percent from 1992/93. Increased wheat for feeding imports account for some of the increase. Recently, Mexico purchased 200,000 tons of feed wheat from Canada. While some of Canada's wheat registered as feed wheat can be milled, this sale is most likely destined for feed channels because livestock firms are the purchasers.

In East Asia, South Korea's imports are projected up 23 percent to 4.8 million tons, with increased wheat for feeding imports accounting for nearly all the change. Much of this wheat is coming from Canada and Australia, although there have been some small purchases from China. Many of the sales were made last year for delivery in the current marketing year. Recently, feed wheat supplies in Canada and Australia have tightened and export prices are rising along with prices of corn from the United States and China.

Southeast Asian imports continue to rise in response to growing consumer demand resulting from rapid economic growth. In the Philippines and Malaysia, small amounts of wheat for feeding are also being imported. Imports by Sub-Saharan African countries are projected up 2 percent from 1992/93, led primarily by the 76 percent increase in Nigeria's imports.

Competitor Exports Fall in Response to Reduced World Trade

Production by the major competitors is estimated down 3 percent from 1992/93. But large beginning stocks, especially in the EU and Canada, together with the slump in world trade has created a very competitive environment.

Major competitor exports are projected at about 54 million tons, down 9 percent from 1992/93, but their market share is forecast to be only marginally below that of 1992/93 at 54 percent.

Southern Hemisphere countries are just completing their 1993/94 harvest. Australia is forecast to produce 18 million tons of wheat and Argentina is projected to harvest 9.5 million tons. While Argentina's crop suffered from early season dryness and disease problems, Australia is harvesting its largest crop since 1984/85, with only minor quality problems.

Australia is forecast to harvest 9.5 million hectares, up 4 percent from 1992/93. High prices after last season's weather damaged crop, and low wool prices encouraged producers to expand production despite prospects of lower export prices. Although drought continued in Queensland and storms at harvest damaged some wheat in New South Wales and Victoria, growing and harvesting conditions in Western Australia were very favorable. Most of the crop in New South Wales, Victoria, and South Australia is also reported to be good quality.

Australia's exports are expected to increase by a third from 1992/93 to 12.1 million tons. The country will benefit from the shortage of high protein wheat in the world market. Australia's high quality crop is allowing it to penetrate markets in places where Australia normally has few competitive advantages. These include countries in Latin America because similar quality wheat from Argentina, Canada, and the United States is in short supply and higher priced. Australia has

already sold wheat to Colombia and Ecuador and sales to Chile and Peru are likely.

In addition, Australia is maintaining its presence in more traditional markets, reportedly completing sales of 900,000 tons to China and 1 million to Russia. Most of the wheat exported to Russia will apparently go to the eastern regions because it is cheaper to import wheat from Australia than to transport wheat across long distances within the FSU. Exports to the Middle East, especially Iran, are likely to increase and Australia continues to ship wheat for feeding, mostly from last year's crop, to South Korea and other Asian countries.

Argentina's crop is projected at 9.5 million tons, down 2 percent from 1992/93. Although harvested area is forecast up 9 percent, yields are projected to fall 10 percent from 1992/93 because of frost during the growing season and rain in the northern part of Argentina at harvest, which damaged the crop and exacerbated disease problems. However, in the southern wheat regions, the wheat crop appears to be in good condition, alleviating early fears that a greater proportion of the Argentine crop would be of poor quality.

Exports are projected at 5.2 million tons, down 28 percent from 1992/93. Although Argentina faces increased competition from the EU and Canada in Brazil, and Australia in smaller Latin American markets, Argentina still has a competitive advantage in most of these markets. Exports to Brazil will probably be constrained only by their supply of quality wheat.

Figure 8
Australia's Wheat Production and Exports

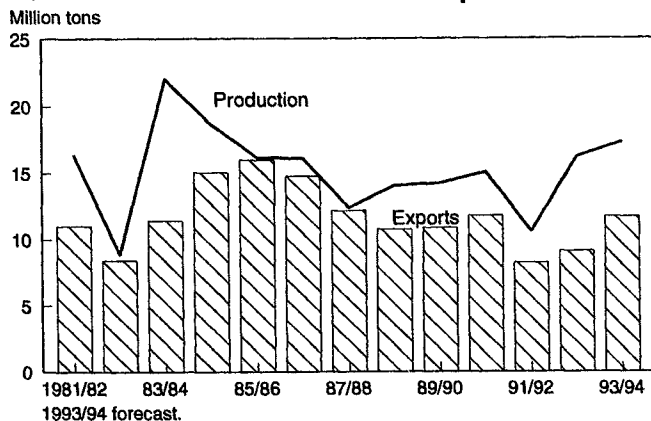
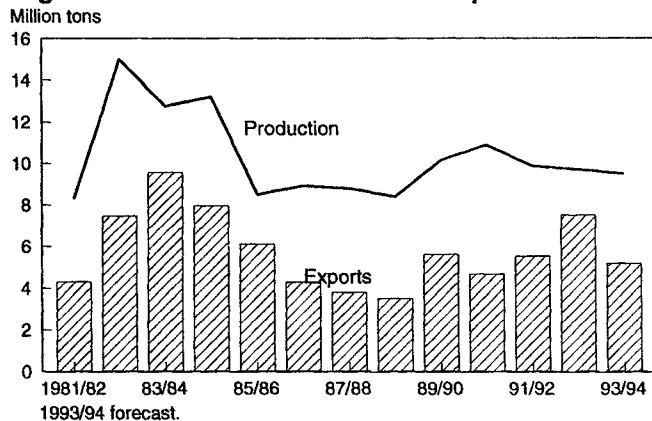


Figure 9
Argentina's Wheat Production and Exports



Canada's production is estimated at 27.8 million tons, down 7 percent from 1992/93. Cool, wet weather at harvest and disease problems brought down yields and reduced quality. Although crop quality was below average, it was much improved from last year's weather damaged crop. However, Canada's stocks of high quality wheat were drawn down in 1992/93, and while the 1993/94 crop is much improved, high quality wheat (especially durum) remains in short supply.

Canada's exports are projected down 14 percent to 18.5 million tons, although durum exports are reported to be well ahead of a year ago. Reduced imports by the FSU, China's continuing slow import pace, and low supplies of high quality durum and high protein spring wheat, are likely to lead to a decline in Canada's share of the world market in 1993/94. Canada is still exporting large volumes of wheat for feeding to South Korea and other markets. In addition, exports to the United States, Brazil, and other western hemisphere markets are also likely to increase.

EU production is estimated at 80.6 million tons, down 5 percent from 1992/93. Area fell 8 percent, partly in response to CAP reforms, but also because of weather. However, yields increased 3 percent from the 1992/93 drought reduced crop, but remained below 1991/92.

EU exports are projected down 16 percent to 18.5 million tons. Declines in FSU and East European imports have reduced EU sales from a year ago. North Africa remains a

strong market for French wheat and German bread wheat has made inroads into Latin American markets (including Mexico and Brazil), but these are not enough to overcome the impact of the overall decline in EU trade. In addition, the EU is suffering from a shortage of durum to export as grain or as semolina. Normally Italy exports over 1 million tons of semolina, mostly to North Africa. But this year, domestic durum production is down and stocks are extremely tight throughout the EU. In December, export levies were imposed on durum when international prices exceeded those of the EU's threshold levels. The EU has opened intervention tenders for durum and for processing durum into semolina for export to Algeria. However, export licenses for only 400,000 tons of semolina have been issued through mid-February.

Exports by smaller exporters (Turkey, Eastern Europe, Saudi Arabia, non-EU western Europe, and others) are also down substantially from 1992/93. Excluding FSU exporters, their market share is projected to fall from 6 percent in 1992/93 to 5 percent in 1993/94. Although Turkey produced a record crop, its beginning stocks were very low. Exports are projected at 1.5 million tons, down 8 percent from 1992/93. Saudi Arabia exports are also projected down 20 percent to 2 million tons because the government is buying less wheat from producers, a de facto reduction in the large subsidies producers have been receiving. Therefore, less is available for export. East European exports are forecast at 250,000 tons, down from 1 million tons in 1992/93 because of reduced export supplies and lower imports by the FSU.

1993/94 Situation and Outlook

EEP Program Helps U.S. Export Pace

Despite the forecast decline in imports by the FSU, China, and South Asian countries, the U.S. has been able to keep a strong export pace through the first half of the marketing year and into January.

Large EEP bonuses have kept U.S. wheat prices very competitive in many markets. The U.S. share of the world market is forecast at 33 percent, about equal to 1992/93.

U.S. exports are forecast at 33 million tons (July/June), down 11 percent from 1992/93. However, the pace of actual exports (not including future commitments) between June 1993 and the end of January 1994 has been relatively strong, down only about 1.5 million tons from the same period a year ago, according to the February 10 Export Sales Report. Sales and commitments to North African countries are up 7 percent from a year ago. In addition, strong gains are being registered for many smaller markets in nearly all regions, including Nigeria, Yemen, Mexico, and the Philippines.

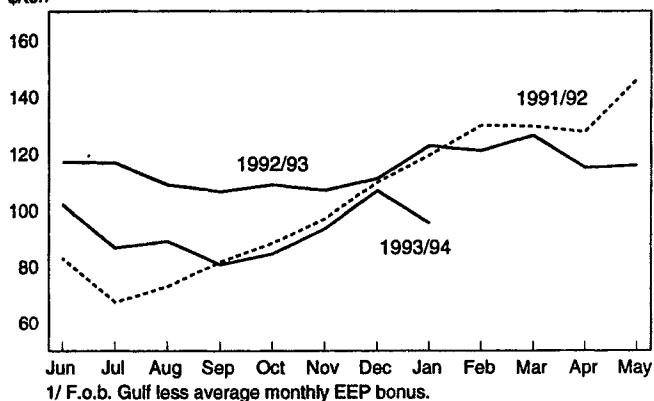
Large EEP bonuses have helped the United States maintain a strong presence in those markets although U.S. f.o.b. Gulf prices have risen substantially since the beginning of the

marketing year. Average EEP bonuses rose to nearly \$60 per ton in January, a record high. In October, EEP bonuses for several countries began to exceed \$60 per ton regularly. Then, in January, China received the highest bonus of the season at \$65.61 or reportedly 74 percent of the purchase price. North African countries and Sub-Saharan African markets have also benefited from bonuses over \$60 per ton.

The bonuses have been retreating somewhat since mid-January when f.o.b. Gulf prices began to soften. EU restitutions have been declining, the result of reduced internal support prices for grain and the strong dollar exchange rate. EU restitutions used to be well above EEP bonuses. In January, they were slightly below.

Even though EEP bonuses have been high, export prices (f.o.b. Gulf less average monthly EEP bonus) rose in November and December, but fell in January. The volume of EEP

Figure 10
U.S. Wheat Export Prices 1/
 \$/ton

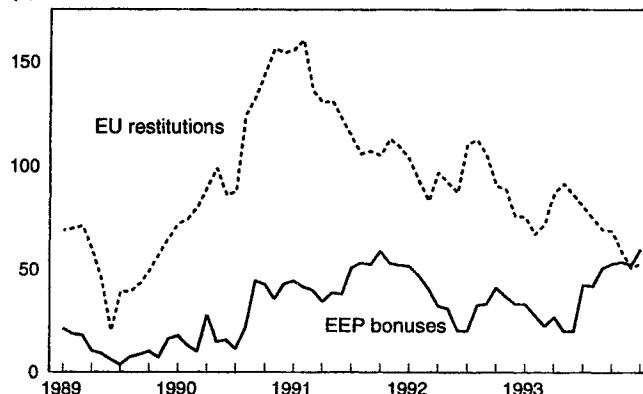


sales between July and the end of January reached 12.8 million tons compared to 16.7 million for the same period a year ago. Excluding sales to the FSU and China, the decline is less accentuated. EEP sales to countries other than the FSU and China have dropped 8 percent from a year ago. However, the sales pace is likely to slow in the second half of the season because of seasonal patterns and the unusually heavy volume purchased in the first half of the year by the smaller countries.

China returned to the U.S. market in January for the first time since July, purchasing 815,000 tons. It remains unclear when China will return, and when it does, if it will buy for short-term delivery as in January or begin buying new crop wheat in April as it has in the past.

It appears that, in general, CEROIL, the government's purchasing agency has been buying on behalf of provincial grain bureaus, although that may not have been the case in the recent purchase of U.S. wheat. The provincial grain bureaus appear to be purchasing grain on an as-needed basis and when they have enough foreign exchange to finance it. Therefore, future purchases are more likely to be ad hoc and for nearby delivery rather than carefully planned purchases for delivery months in advance. However, the central government probably will not hesitate to make purchases if food prices rise too sharply.

Figure 11
U.S. and EU Wheat Export Subsidies
 \$/ton



While Russia continues to make payments on its credit obligations, no new credit guarantee program has been requested. Russian officials have said publicly that they will keep all grain imports low in 1993/94, but it is possible that changes in policy and winter crop conditions could lead to a return to the world wheat market later in the season. Uzbekistan has been the largest FSU purchaser of U.S. wheat, using cotton to barter for wheat. Other republics have been receiving wheat through credit, food aid, and other assistance programs.

Like overall U.S. wheat sales, sales under the GSM-102/103 programs are lower than this time a year ago. As of February 4, credit guarantee applications received by the CCC (an indication of sales activity under the programs) amounted to \$363 million, down from almost \$520 million at the same time in fiscal 1993 when Russian importers were heavy purchasers. Top purchasers in fiscal 1994 are importers in Algeria, South Korea, and Morocco.

P.L. 480 allocations for wheat as of mid-January have reached 874,000 tons, 20 percent below a year ago. Georgia is the largest recipient, followed by Armenia, Guatemala, and Latvia. Title II allocation have reached 435,000 tons, down 25 percent from a year ago. Ethiopia, Bolivia, and Peru are the largest recipients.

Import Surge Triggers ITC Investigation

President Clinton has directed the International Trade Commission (ITC) to initiate an investigation under Section 22. After receiving the ITC report, the President can impose fees and/or quotas.

The increase in U.S. wheat imports from Canada is a long running dispute, which originally involved durum wheat but has grown to include all wheat. Some producer groups and their representatives in the U.S. Congress have accused Canada of violating the U.S.-Canada Free Trade Agreement (CFTA) through the operation of the Canadian Wheat Board (CWB) confidential pricing policy and the Western Grain Transportation Act (WGTA) rail subsidy.

The CFTA prohibits agricultural export subsidies in trade between the U.S. and Canada; and prevents either country from selling agricultural goods below acquisition price. A 1990 U.S. International Trade Commission (ITC) study on U.S.-Canada durum wheat trade found no significant difference in the price U.S. millers paid for Canadian durum compared to U.S. durum. The ITC also noted that the WGTA was not solely an export subsidy since the WGTA applied to shipments intended both for export and domestic usage.

In 1993, a CFTA dispute settlement panel addressed the definition of acquisition price, but could not resolve whether Canada sold below acquisition price. The panel recommended an annual audit of CWB durum sales into the U.S. The first audit, covering the first three and a half years, is underway.

A Section 22 ITC investigation of all wheat grain and flour imports began January 18, 1994. The ITC report is anticipated to be completed in mid-July 1994 and the ITC will hold a

public hearing on May 12th. The investigation will find if imports cause material interference or threaten to cause material interference to the wheat program and may include recommendations to the President.

Any recommendations by the ITC to the President are not binding. Each of the six commissioners could make a separate recommendation. USDA would also have the opportunity to submit a recommendation to the President before he acts under Section 22.

A section 22 action is allowed under the U.S.-Canadian Free Trade Agreement. Under the trade agreement the United States must show 1) a significant increase in imports from Canada and, 2) that this increase is caused by a change in either or both U.S. or Canadian government programs. For example, even if the U.S. implemented a program that boosted U.S. prices and made the U.S. market attractive to Canada, the United States could use Section 22 under the Free Trade Agreement. A variety of factors, including both U.S. and Canadian programs, may have contributed to the increased imports.

The President could decide to act before the ITC has completed its investigation, in order to stem the flow of wheat into the United States. A fee or quota could be put in place immediately, and the ITC investigation would still proceed.

Figure 12
U.S. Wheat Imports

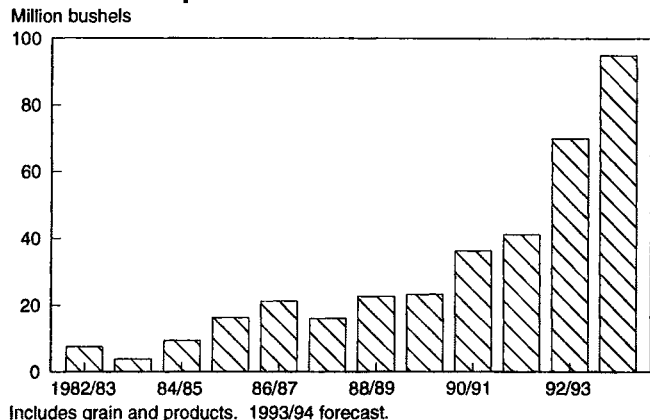
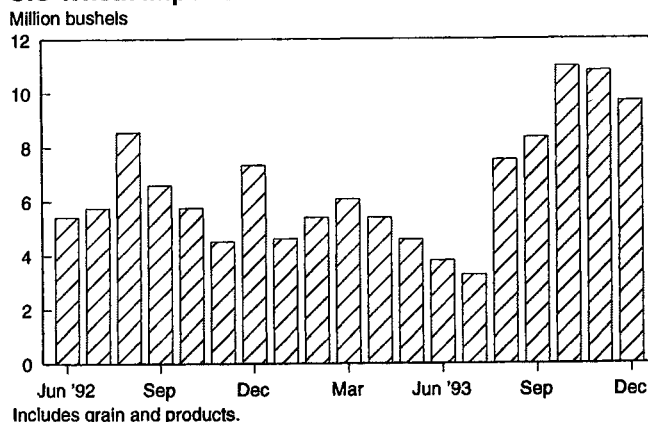


Figure 13
U.S. Wheat Imports



U.S. Production Estimates Revised Down, Use and Prices Up

The overall balance between U.S. supply and demand has tightened over the winter. Forecasts for exports, food use, and seed use have been increased, more than offsetting lower forecast feed and residual use and larger prospective imports.

Ending Stocks Forecast Below 600 Million Bushels

USDA's forecast of 1993/94 ending stocks were reduced each month from September 1993 to January 1994. While 1993/94 beginning stocks and imports are up and production was down compared to 1992/93, there is a small increase in wheat supplies forecast for 1993/94. On September 1, stocks were up about 20 million bushels from a year earlier, or 1 percent, but by December 1, stocks were down slightly or basically the same as a year earlier. However, total use in the last half of the marketing year is not expected to match the previous year's pace, mostly because of lower expected exports.

Loans outstanding in the Farmer-Owned Reserve (FOR) are gradually coming due, with 19 million bushels in the FOR on December 1, and only 5 million expected to still be in the program at the end of the year. CCC inventory remains at about 150 million bushels, almost all of which is in the Food Security Wheat Reserve. A small increase is expected in use of the 9-month loan program for 1993 crop wheat, 250 million bushels versus 240 million a year earlier. As of February 6, 1994, 126 million bushels were outstanding under loan, compared to 137 million a year ago, because loans are being redeemed more quickly this year. With generally low amounts of wheat under various government stock programs, most of the 1993-crop wheat is in privately owned unencumbered stocks.

Increased Domestic Use Forecast

Food use started a bit slowly in 1993/94, possibly because of a late spring wheat harvest and transportation bottlenecks caused by flooding in the midwest. Preliminary food use for the first quarter was below a year earlier. However, mill

Figure 14
Ending Stocks by Position

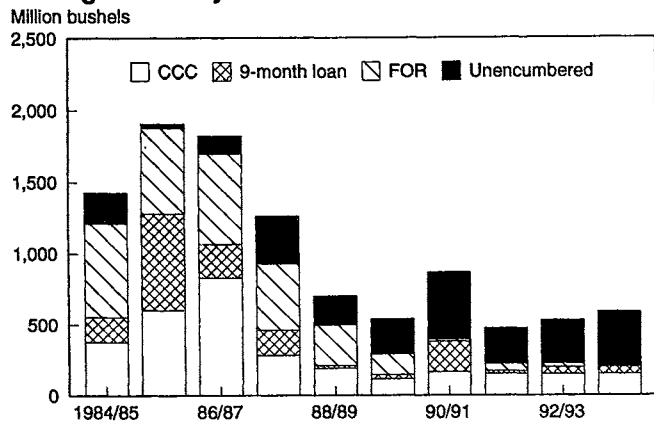


Table 1--Wheat supply, disappearance, and stocks, June-May

Item	1990/91	91/92	92/93	93/94F
Million bushels				
Stocks, June 1	536	866	472	529
CCC inventory	117	163	152	150
Farmer-owned reserve 1/	144	14	50	28
Outstanding 9 months	30	217	20	47
Uncommitted	246	473	250	304
Production	2,736	1,981	2,459	2,402
Imports	8	8	20	15
Total supply	3,281	2,855	2,951	2,946
Use, June-Aug.				
Food	194	189	211	207
Seed	2	1	1	1
Feed & residual	407	372	347	311
Exports	269	252	283	301
Total use	871	814	843	820
Stocks, Sept. 1	2,410	2,041	2,108	2,126
CCC inventory	105	163	152	150
Farmer-owned reserve 1/	119	76	37	22
Outstanding 9 months	120	149	77	103
Uncommitted	2,066	1,653	1,842	1,851
Imports	13	7	17	30
Total supply	2,423	2,048	2,124	2,156
Use, Sept.-Nov.				
Food	209	213	219	221
Seed	63	62	63	63
Feed & residual	-34	-34	-93	-43
Exports	277	363	345	329
Total use	515	604	534	570
Stocks, Dec. 1	1,908	1,444	1,590	1,586
CCC inventory	130	161	151	150
Farmer-owned reserve 1/	65	127	36	19
Outstanding 9 months	261	105	181	193
Uncommitted	1,453	1,051	1,222	1,224
Imports	8	11	17	
Total supply	1,916	1,454	1,607	
Use, Dec.-Feb.				
Food	191	193	195	
Seed	2	2	3	
Feed & residual	101	0	11	
Exports	225	372	356	
Total use	520	567	564	
Stocks, March 1	1,396	887	1,043	
CCC inventory	153	157	150	
Farmer-owned reserve 1/	19	85	33	
Outstanding 9 months	329	47	120	
Uncommitted	896	598	740	
Imports	7	15	16	
Total supply	1,403	903	1,059	
Use, March-May				
Food	192	194	205	
Seed	26	32	28	
Feed & residual	23	-88	-71	
Exports	297	293	370	
Total use	538	431	531	

1/ Includes special producer loan program.
F = forecast.

the first quarter was below a year earlier. However, mill grind picked up as the year progressed, and by December 1993, was much higher than normal. Some mills tend to shut down during the last week of December for maintenance, so it is normal for mill grind to be much lower in December than in October or November. However, in 1993, mill grind was reportedly very heavy during the first half of December, so that although some mills did shut down at the end of the month, the total mill grind for the month was almost as high as the previous months and almost 10 million bushels higher than December 1992. Despite the unusual monthly pattern in 1993/94, wheat food use seems to continue the trend established since the mid-1970s, modest growth, but increasing at a rate faster than population growth.

Seed use has been revised upwards back to 1989, based on survey data collected by NASS. Seeding rates have been higher than previously estimated, particularly for spring wheat.

Feed and residual use in 1993/94 is forecast to reach 275 million bushels, up 84 million bushels or 44 percent from a year earlier. In the summer quarter, when most feed use normally takes place, feed and residual use is estimated to have been down over 10 percent from 1992/93. Wheat prices were higher than feed grain prices, wheat harvests were delayed, and high quality wheat had large price premiums. In areas where wheat is often used as feed, such as the Panhandle of Texas, the wheat had above average quality and protein.

Figure 15

Food Use

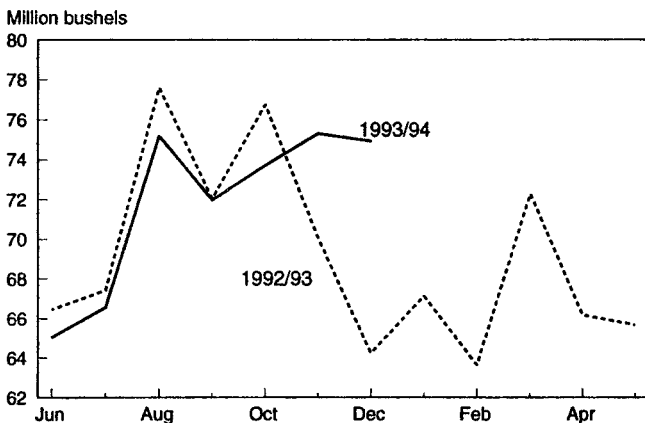
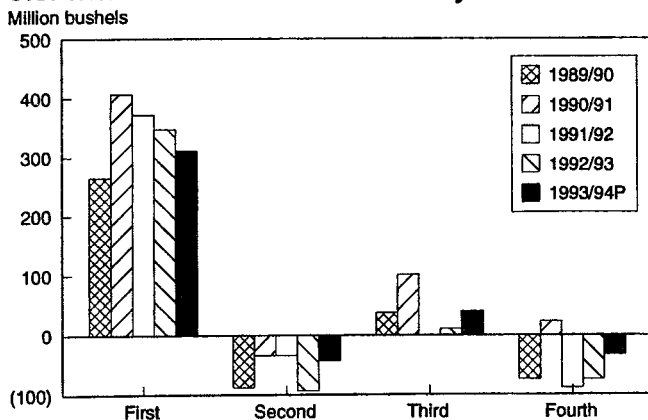


Figure 16

U.S. Wheat Feed and Residual Use by Quarter



Not until autumn did the magnitude of corn production problems become clear, and feed grain prices increase rapidly. Through the fall and winter, wheat prices have increased, not as quickly as corn prices, but enough to limit wheat feed use to price-discounted, low quality wheat. However, some of the low quality wheat has vomitoxin, reducing its usefulness for feed, while many milling processes reduce the vomitoxin levels substantially.

Wheat feed and residual is usually negative in the second quarter, and 1993/94 fits the rule, but the negative was less than half the size of the previous year, leaving feed and residual for the first half of 1993/94 up about 14 million bushels. For the second half of 1993/94, feed and residual is expected to be positive, as prices should encourage some wheat feeding, particularly of imported wheat. Moreover, the lower-than-average quality and higher-than-average moisture of the 1993 crop could also increase losses in handling and storage.

Production Update Reduces 1993 Crop

In January, USDA reduced its production estimates for 1993. Because of the extremely late harvest, the final estimate included more revisions from the October estimates than usual. Production was reduced almost 1 percent from October. Planted acres were increased by more than 100,000, but harvested area was reduced by 335,000 acres, mostly in North Dakota and Minnesota. Yield estimates also declined in those States, offsetting an increase in Montana, leaving the national average yield down 0.1 bushel per acre at 38.3.

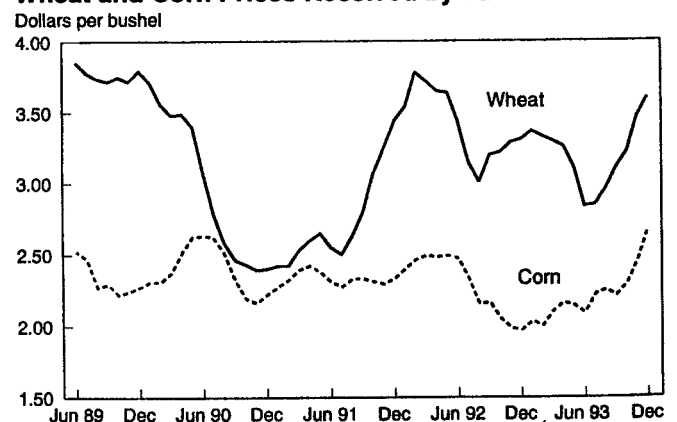
As expected, Kansas recovered from 1992 and was the largest wheat producer in 1993, despite below-average yields. North Dakota dropped to second place. Despite a slight increase in planted area, harvested acres were down, and yields were below average -- in stark contrast to record yields in 1992. Montana was the third largest wheat producer in 1993, posting record production, above 200 million bushels. Washington also posted record production in 1993, with increased area and near-record yields.

1993/94 Season-Average Wheat Price Forecast Near 1992/93

The U.S. wheat farm price is forecast at \$3.10 to \$3.25 per bushel, compared with \$3.24 in 1992/93. Wheat prices early

Figure 17

Wheat and Corn Prices Received by Farmers



in the marketing year were much below 1992/93, but during the winter moved above the year earlier. Wheat prices are likely to remain above year-ago levels through the rest of 1993/94 because of tightening supplies and high feed grain prices. A significant decline in wheat prices compared to corn

prices would encourage wheat feeding, and with ending stocks already forecast fairly low, it is unlikely that much wheat will be fed until it is clear that 1994 production prospects are at least average or better

Wheat by Class

Durum Stocks Forecast Lowest in Over Four Decades

While ending stocks of hard red wheat are forecast to increase in 1993/94, high protein bread wheat and durum are in exceptionally tight supply.

World Durum Supply Tight, Import Demand Strong

U.S. durum prices are the highest since 1988, not only in reaction to tight U.S. supplies, but also because foreign exportable supplies are low, prices high, and import demand strong. EU supplies are unusually tight as plantings have been cut in response to CAP reform. Although Canada's durum production is up from a year ago, stocks were down. Because of weather problems, quality durum is particularly scarce. Tight world durum supplies are expected to continue in 1994/95, although the higher prices will lead to larger plantings.

World durum grain trade could match year earlier levels despite much higher prices and reduced imports by the FSU, because of strong demand from North Africa. Production problems are increasing demand in Algeria and Morocco for durum grain imports. However, EU export licenses for export of semolina to North Africa were only 400,000 tons as of mid-February, down sharply from previous years.

Canada, the largest durum exporter, is forecast by the IWC to increase durum exports, but freeze damage reduced the quality of Canada's 1993 crop. The 1992 crop was also below average quality, so much of Canada's beginning stocks were low quality. Canada is reducing durum stocks in 1993/94, and is expected to sharply increase area planted in 1994.

U.S. Durum Supply Down Sharply in 1993/94

Durum beginning stocks were down modestly in 1993/94, dipping below 50 million bushels for the first time since 1975/76. However, prices were not very strong, and users were confident of having ample supply because of the expected increase in imports from Canada. Production dropped by almost a third in 1993 as U.S. producers switched area to higher priced HRS wheat, and yields came in below average, as opposed to the record yields in 1992. Imports are now forecast up only modestly, as Canada has many attractive alternative markets and limited supplies.

Demand for durum has been strong in 1993/94, despite much higher prices. Through December, preliminary mill grind is ahead of a year earlier. Despite increased imports of pasta products, including low priced imports from Turkey, demand for U.S. produced pasta remains strong. Durum seed use will

increase in 1993/94 as more area is planted for 1994 production. Even U.S. durum exports are forecast up slightly, due to strong world demand and EEP sales.

U.S. durum prices have increased dramatically in 1993/94. While durum sold at a discount to other wheat classes in 1992/93, by January 1994, the preliminary national average farm price was over \$5 per bushel.

Ending Durum Stocks Forecast at Minimal Levels

USDA forecasts 1993/94 ending stocks at 21 million bushels. At about one-sixth of forecast use, that does not appear as tight as for other classes, such as SRW. However, beginning/ending stocks are measured on June 1, and although winter wheat will be entering harvest at that time, durum wheat harvest would still be at least 2 months away. Durum users must carry enough old crop over to maintain mill grind during all of June and July, and part or all of August. With domestic mill grind running about 5-6 million bushels per month, about 15 million bushels of the forecast June 1, 1994, stocks will be needed to keep mills running until the new crop comes in. Imports in June and July will also contribute to summer supplies.

White Wheat Prices Discounted In 1993/94

While world supply of durum contracted in 1993/94, exportable supplies of white wheat increased at the same time that demand was reduced. Australia produced a much larger crop in 1993/94, providing increased competition. Meanwhile, India's imports dropped from 3 million tons (of all classes of wheat) to only 100,000 tons in 1993/94. Pakistan's imports are also forecast to be down substantially.

U.S. white wheat supplies are forecast up 27 percent in 1993/94, mostly because of increased production. With increased supplies and competition, white wheat has become the cheapest class in 1993/94, after being the highest priced class in 1992/93. For example, in December 1993, when the national average farm price for wheat was \$3.60 per bushel, in Idaho the average was \$2.96, and in Washington, \$3.24. The low white wheat prices have encouraged use, and increases are forecast for both domestic use and exports.

Table 2--HRW supply and demand 1/

Item	1989/90	90/91	91/92	92/93	93/94P
Million acres					
Area:					
Planted	37.5	38.0	35.5	36.2	36.4
Harvested	26.1	32.6	27.4	29.3	30.1
Yield, bu/ac.	27.2	36.8	33.0	33.0	35.7
Million bu.					
Supply:					
Production	711	1,199	902	966	1,073
Beg. stocks	302	215	360	194	204
Tot. supply	1,013	1,414	1,262	1,161	1,278
Use:					
Food	295	315	336	336	
Seed	42	38	40	40	
Residual	103	331	134	117	
Tot. dom.	439	685	511	493	523
Exports	359	368	557	464	475
Total use	798	1,053	1,068	957	998
Ending stocks	215	360	194	204	281

1/ ERS estimates of area, yield, and domestic use.
P = projected.

Table 3--HRS supply and demand 1/

Item	1989/90	90/91	91/92	92/93	93/94P
Million acres					
Area:					
Planted	16.5	16.2	14.0	17.8	17.5
Harvested	15.9	15.4	13.5	17.2	16.0
Yield, bu/ac.	27.3	36.1	31.9	40.9	31.9
Million bu.					
Supply:					
Production	433	555	431	702	510
Beg. stocks	219	155	277	128	170
Imports	7	7	17	34	56
Tot. supply	660	717	724	864	736
Use:					
Food	200	204	180	213	
Seed	23	19	27	26	
Residual	1	16	10	17	
Tot. dom.	225	239	217	256	282
Exports	280	201	380	438	275
Total use	505	440	597	694	557
Ending stocks	155	277	128	170	179

1/ ERS estimates of area, yield, and domestic use.
P = projected.

Table 4--SRW supply and demand 1/

Item	1989/90	90/91	91/92	92/93	93/94P
Million acres					
Area:					
Planted	13.4	14.2	11.4	10.5	10.7
Harvested	12.0	12.8	9.5	8.6	9.3
Yield, bu/ac.	45.8	42.9	34.4	49.4	43.1
Million bu.					
Supply:					
Production	549	547	325	427	402
Beg. stocks	39	32	80	41	43
Tot. supply	588	579	405	468	445
Use:					
Food	145	145	145	145	
Seed	27	22	20	20	
Residual	40	102	94	50	
Tot. dom.	212	269	259	216	225
Exports	345	230	105	210	185
Total use	557	499	364	426	410
Ending stocks	32	80	41	43	36

1/ ERS estimates of area, yield, and domestic use.
P = projected.

HRS Supplies Down in 1993/94

Despite increased beginning stocks, HRS supplies are forecast down because of sharply reduced production. High quality, high protein wheat is in particularly tight supply, and premiums have been the highest in many years. Prices for HRS have been at a premium to other classes, except durum. For example, farm prices in North Dakota have been the highest in any State reporting since October 1993.

Table 5--White wheat supply and demand 1/

Item	1989/90	90/91	91/92	92/93	93/94P
Million acres					
Area:					
Planted	5.4	5.2	5.9	5.2	5.4
Harvested	4.5	5.0	4.2	4.8	5.2
Yield, bu/ac.	55.8	62.3	52.3	55.2	66.8
Million bu.					
Supply:					
Production	251	313	219	266	347
Beg. stocks	81	85	87	54	64
Imports	3	10	6	9	8
Tot. supply	335	408	311	329	419
Use:					
Food	50	55	57	60	
Seed	7	8	7	8	
Residual	0	42	1	2	
Tot. dom.	57	105	65	70	108
Exports	193	216	193	195	240
Total use	250	321	258	265	348
Ending stocks	85	87	54	64	72

1/ ERS estimates of area, yield, and domestic use.
P = projected.

Table 6--Durum supply and demand 1/

Item	1989/90	90/91	91/92	92/93	93/94P
Million acres					
Area:					
Planted	3.8	3.6	3.3	2.5	2.2
Harvested	3.7	3.5	3.2	2.4	2.1
Yield, bu/ac.	25.1	34.9	32.5	39.7	33.6
Million bu.					
Supply:					
Production	92	122	104	97	69
Beg. stocks	60	50	62	55	49
Imports	13	19	19	27	30
Tot. supply	165	192	185	179	148
Use:					
Food	59	66	71	75	
Seed	6	5	4	4	
Residual	-5	5	11	5	
Tot. dom.	60	76	86	83	77
Exports	55	53	45	47	50
Total use	115	129	131	130	127
Ending stocks	50	62	55	49	21

1/ ERS estimates of area, yield, and domestic use.
P = projected.

Actuarial Soundness of the Wheat Crop Insurance Program in the United States

Keith Coble and Joy Harwood^{1/}

Abstract: Poor actuarial performance has been a serious problem for the Federal Multiple Peril Crop Insurance (MPCI) program, particularly since the late 1980's. Rather than focusing on historical average loss ratios, as is commonplace, this article suggests a new method for measuring actuarial soundness that normalizes loss ratios for weather. (Loss ratios are calculated as total indemnities divided by total premiums. Total premiums include the producer-paid premium plus the Government-paid premium subsidy.) The new method uses a 37-year history of weather data and current premium rates. Findings indicate that, for wheat, the normalized measure shows 1993 actuarial soundness at 1.18 for the study area. This compares to the commonly used historical average loss ratio of 1.55 over the 1981-92 period. This analysis indicates that, even when the effects of weather are normalized, the program is not actuarially sound in the aggregate, and points to the specific counties where closer investigation by the Federal Crop Insurance Corporation (FCIC)--and possible rate changes--are most needed to achieve actuarial benefits.

Keywords: Crop insurance, loss ratios, actuarial soundness.

The Federal Multiple Peril Crop Insurance program has been strongly criticized in recent years for its poor actuarial performance. Actuarial performance is generally measured by historical loss ratios, which are calculated as indemnities paid divided by total premiums, over a specified period. Indeed, the Omnibus Budget Reconciliation Act (OBRA) of 1993 mandates that the program, in the aggregate, achieve a loss ratio of 1.1 by October 1, 1995. The Federal Crop Insurance Corporation, which administers the program, is currently investigating ways in which to achieve that actuarial target.

Because of major program expansion in 1980, loss ratios are generally measured over the 1981-92 period. One factor that clouds historical loss ratio analysis is that it is difficult to separate the effects of poor weather from policy-related actuarial problems. Because of these difficulties, this article suggests a new method for loss ratio analysis. It accounts for the variations in loss ratios caused by weather and random events, and provides an estimate of loss ratios, by county for the wheat program, that are normalized for weather.

There are two basic levels at which this method might prove useful. First, at a disaggregate level, this new method can be used to identify county/crop programs that would be expected to have the poorest actuarial performance, in future years, even in the presence of "normal" weather. Second, at the aggregate level, it could be used to appraise overall program performance. This is particularly relevant given the actuarial performance criteria mandated by the 1993 OBRA.

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A Short History of MPCI

MPCI is a voluntary program that assists producers in managing yield risk. In exchange for a premium payment to FCIC, producers receive indemnities from FCIC whenever yields fall below a guaranteed level (see box for additional information on program operation). The MPCI program was first established in 1938 in response to the private sector's inability to meet producer demand for crop insurance. From 1938 to 1980, the program was limited to major crops and production regions.

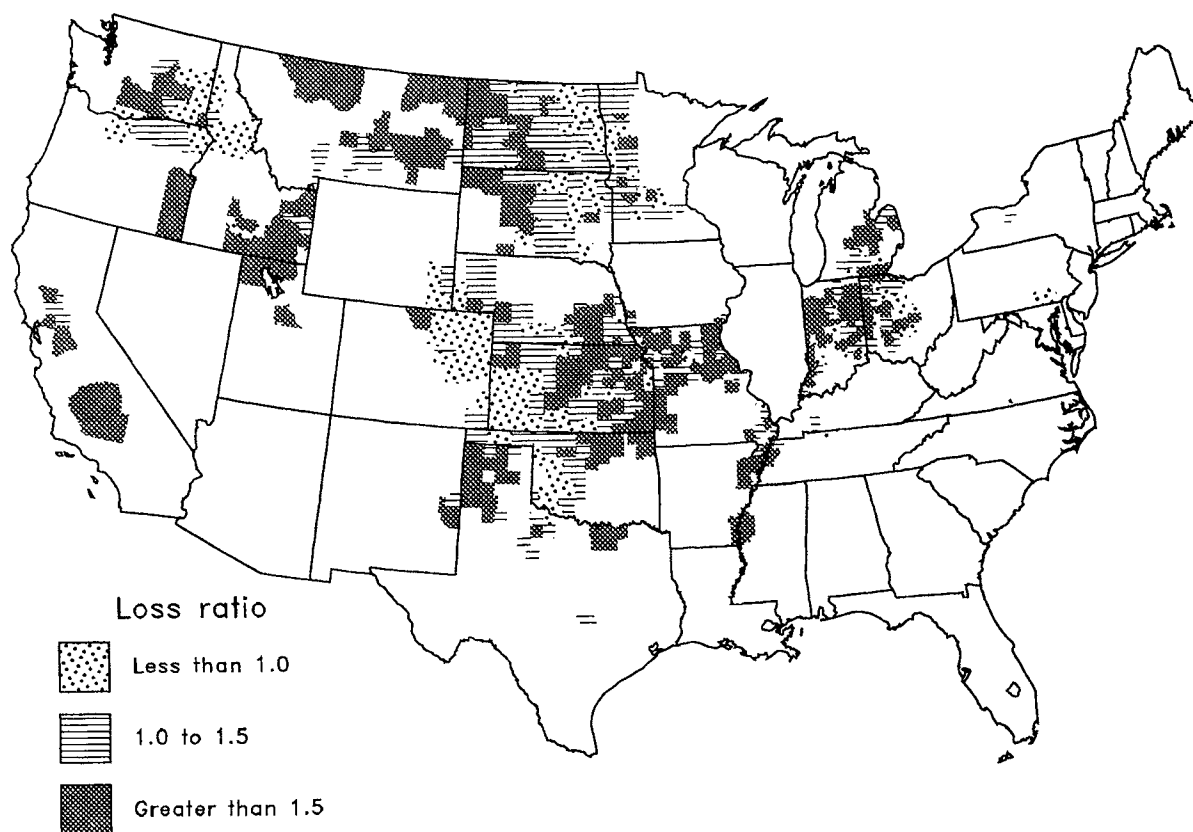
The Federal Crop Insurance Act of 1980 was intended to make MPCI the primary form of disaster protection, replacing the statutory disaster assistance program of the late 1970's and precluding the need for ad hoc disaster assistance. The Act encouraged expansion to new crops and regions, and emphasized the use of private insurance firms to handle policy sales and loss adjustments.^{2/} To encourage producer participation, Federal premium subsidies of up to 30 percent were authorized.

Actuarial soundness of the MPCI program since 1980 has been poor. For MPCI, the aggregate U.S. loss ratio across all crops has exceeded 1.0 in each year between 1980 and 1992, averaging 1.46. Over this period, indemnities paid by FCIC exceeded premiums received by FCIC by \$2.6 billion, excluding the premium subsidy.

^{2/} Between 1980 and 1991 the number of county/crop programs increased from 4,063 to 21,373.

Figure A-1

Wheat Weighted Average Loss Ratio, 1981-92



How the Program Works

Crop insurance is voluntary, and farmers who sign up for the program pay a premium. Farmers can buy crop insurance regardless of whether they enroll in the commodity programs. A farmer may choose coverage at 35, 50, 65, or 75 percent of the farm's actual average yield over the past 4 (to 10) years. If at least 4 years of actual farm data are not available, adjusted ASCS program yields are substituted in the series. A farmer receives payments based on individual yield shortfall, regardless of whether or not the county has been declared a disaster area.

As an example, suppose a farmer chooses the 75-percent coverage option, and has a 10-year-average yield of 100 bushels per acre of the insured crop. The farmer's yield must fall below 75 bushels per acre before an indemnity payment is received. This indemnity is then calculated by multiplying the amount of the yield loss (in this case, the difference between 75 bushels and the lower yield) by a predetermined price per bushel.

This predetermined price is known as a price election, and is chosen by the farmer at crop insurance enrollment. The farmer has the option to choose any price at, or below, the price election announced by FCIC, down to 30-percent of the price election. Price elections set by FCIC are based on futures prices, supply and demand variables, and other factors.

Large loss ratios are expected in years of major droughts or other widespread disasters and, in an actuarially sound program, losses will be offset by gains in more normal years. However, for most crops, including wheat, underwriting gains in good-weather years have not accumulated to offset losses in poor-weather years. The loss ratio for wheat over the 1980-92 period averaged 1.58 for the U.S., ranging from 0.88 in 1982 and 1983 to 3.96 in 1988. At a disaggregated level,

Montana does not contain any counties where the weighted average loss ratio over that period was below 1.0 (figure A-1). Other major producing regions where actuarial performance was poor include the western Dakotas, eastern Kansas, and the Panhandle of Texas.

Several factors are considered to account for the program's large losses. Rapid expansion to new crops and areas pre-

sumably exacerbated actuarial problems due to underwriting errors resulting from scant historical data in some areas. In areas where FCIC had historical data, rate setting procedures used experience from the relatively good growing conditions in the 1970's to set rates in the 1980's.

Adverse selection and moral hazard have also been suggested as problems. Adverse selection in crop insurance arises when producers are better informed about their own expected yields, and thus better able to assess the actuarial fairness of their premiums, than is FCIC. As a result, producers who recognize that their risks are greater than is implied by the premiums they are charged are more likely to buy insurance, and those who perceive their risks are less than implied by premium rates are less likely to buy insurance. Moral hazard occurs when producers, after purchasing insurance, alter their production practices to increase their chances of receiving an indemnity.

Some Caveats Concerning Loss Ratios

Although the use of historical loss ratios is a common approach to investigating actuarial soundness, two caveats are important. First, it is questionable whether a short time-series

typically used in loss-ratio analyses represents the true distribution of random events that occur. Indeed, loss experience for a given crop may be biased because random events--such as unusual weather--are given disproportionate weight. For example, flooding in the Midwest in 1993 has been estimated to have been at least a 1-in-100-year event. A simple 10-year historical loss measure would implicitly weight the 1993 experience with a probability of 0.1, which is 10 times the appropriate probability. Conversely, a 10-year history that included only very mild weather would miss the extremes.

Second, use of raw historical loss experience implicitly assumes that various program aspects, such as coverage options and premium rates, have remained constant over time. In particular, an unadjusted approach ignores the effects of rate changes over time. Also, if the sample of participants in the program changed, or if they chose different options, loss expectations would be altered. Because recent ad hoc disaster assistance legislation has mandated purchases of MPCIC, the changing sample of participants is of particular concern.

Definition of Terms

Actuarial soundness--The situation where, on average over time, total premiums (including the subsidy) cover FCIC indemnity payments. This situation occurs when FCIC's loss ratio averages to 1.0. With actuarial soundness, indemnity payments to producers would be large in a disaster year, but in non-disaster years, premiums would more than cover indemnities. Over time, premiums should, on average, equal or exceed indemnities for the program to be actuarially sound.

Adverse selection--Would arise where producers are better informed about the distribution of their own yields, and thus better able to assess the actuarial fairness of their premiums, than is FCIC.

Federal Crop Insurance Corporation (FCIC)--The USDA agency that administers the Federal crop insurance program.

Liability--The maximum dollar loss which the insurer may experience under the terms of the insurance contract. For crop insurance, the liability is equal to the dollars of indemnity paid if zero yield is produced.

Moral hazard--Occurs when producers, after purchasing insurance, alter their production practices in a way which increases their expected indemnity.

Loss cost ratio--Calculated by dividing the indemnities paid out by FCIC by FCIC's total liability.

Loss ratio--Calculated by dividing the indemnities paid out by FCIC by the premiums collected (including the premium subsidy). FCIC is said to break even when the loss ratio is 1. But because total premiums include the premium subsidy, even at a loss ratio of 1, FCIC would still not be self-supporting.

Premium--The amount that a producer is charged for the purchase of crop insurance. A farmer's premium depends on that farmer's production history and selection of coverage. Total premium is subsidized at up to 30 percent by FCIC.

Price election--The predetermined price which is multiplied by a yield shortfall to determine the dollar value of the yield loss. At enrollment, the farmer has the option to choose any price at, or below, the maximum price election announced by FCIC, down to 30-percent of the maximum price election.

Indemnity--The amount that a farmer receives as settlement on a loss claim. It is calculated by multiplying the price election by the number of bushels of loss below the yield guarantee.

Method

Because of the above issues, this study suggests a new method for assessing loss experience. The first step in this process involves the development of a growing condition index. This index is then used to explain variations in the loss cost (indemnity/liability) ratio, which is free of the influence of premium rate adjustments. (See Definition of Terms for the difference between the loss cost ratio and the loss ratio.) Finally, normalized loss ratio forecasts are computed by dividing the estimated loss cost ratio by the current premiums charged.

Constructing the Growing Condition Index

To analyze the influence of weather and other uncontrolled events on MPCCI loss ratios, an aggregate index of crop growing conditions was estimated by examining the deviations in actual county yields determined by the National Agricultural Statistics Service (NASS) from the expected yield for the county in each year. This procedure allows all random events to be aggregated into a single measure of growing conditions in the county. If the county yield was abnormally high (low) in a particular year, it is assumed that overall growing conditions for the crop were good (bad).^{3/}

Empirical evidence often indicates that wheat yields over the last 37 years have trended upward due to enhanced genetics and other advances, meaning that county yields would be expected to increase over time. As a result, failing to adjust for trend would bias the estimate of growing conditions. A county could have a poor weather year and low yield in the

^{3/} Underlying this approach is the assumption that NASS county yields are representative of the FCIC insured acreage. In counties in which MPCCI is insuring production with substantially different responses to growing conditions than the majority of production in the county, then the applicability of the growing condition index is questionable.

early 1990's that would still be above a good yield of an earlier year.

Regression analysis is used to capture both yield trend and the year-to-year fluctuations in growing conditions. The model estimates yield as a quadratic function of time:^{4/}

$$(1) \text{Yield}_t = A_0 + A_1 \text{year} + A_2 \text{year}^2 + E_t$$

where yield t is the NASS county yield in year t . This model decomposes the yield series into two separate components: a curvilinear trend, assumed to capture changes in technology, and E_t , capturing random events. Data for the years 1956-1992 are used for a total of 37 time-series observations for each county.

Using the actual and predicted yields from above, a wheat growing conditions index (GCI) was created for each year. This index measures growing conditions relative to normal conditions which could be expected in a given year. Normal growing conditions are defined as occurring in a year when the observed yield is equal to the predicted yield for that year. The GCI is written as:

$$(2) \text{GCI}_t = \text{actual yield } (Y_t) / \text{predicted yield } (Y^*_t) \\ = (Y^*_t + E_t) / Y^*_t .$$

^{4/} The quadratic response model is commonly used in fitting yield trend. It is flexible in that the data dictate the direction and curvature of the trend. The quadratic function does, however, have limitations. For example, if a crop disaster occurs near the end of the yield series, it may cause a downturn in the trend estimate. This is likely a result of the weighting given to an extreme observation in the regression analysis rather than a downturn in technological change. The time trend fitting approach also ignores other potential shifters in expected yield, such as market prices and government programs. Such alternative specifications, while appealing, would require data not generally available at the county level.

Data Sources and Study Areas

The first data source used in this study is NASS wheat county yield data for 1956-92. From the available data, only counties with a complete 37-year time series were included in the analysis. Because NASS has emphasized data reporting for crops and counties with significant acreages, many counties with relatively minor production during some portion of the 37-year period were eliminated.

The second data source is the FCIC EXPERSUM loss summary data for 1981-93 crop years for wheat. These data summarize FCIC policy level information for wheat at the county/crop program level, and include the number of policies, total premiums, liabilities, and indemnities. For the analysis, county-level loss ratios are constructed by dividing total indemnities by total premiums. Loss cost ratios are calculated by dividing total indemnities by total liability. The county aggregate premium rate is obtained by dividing total premiums by total liability.

Summary statistics for the wheat study counties indicate the representativeness of the study area (table A-1). The study area encompassed 82 percent of national indemnities for wheat in 1992, and accounted for a larger percent of U.S. premiums than indemnities. As a result, the aggregate loss ratio for the study area was somewhat lower than for the entire U.S.

Table A-1--Comparison of study area to national program

Number of counties	659
Percent of National indemnities	82.6
Percent of National premiums	86.6
Study area/national loss ratio	0.98

Because the residuals are assumed normally distributed with mean zero, the GCI has an expected value of 1.0 over the range of years used in the estimation of equation (1).

Computing the Normalized Expected Loss Cost Ratio

The GCI is then used to explain the variation in the county/crop program loss cost ratio (indemnities paid/total liability) in a second regression equation:

$$(3) LC_t = B_0 + B_1 \log(GCI_t) + E_t$$

The loss cost ratio (LC_t) is used rather than the loss ratio because the loss ratio varies with changes in premium rates, while the loss cost ratio does not. In other words, if rates change over time, the loss ratio is expected to change as well. The loss cost ratio gives a more precise measure of how indemnities per unit of liability respond to variation in the growing conditions.

The loss cost ratio is hypothesized to have a negative logarithmic response to the GCI. This implies that under very poor growing conditions, the loss cost ratio would be high because of large indemnities paid in such years. As growing conditions improved, the loss cost ratio would decrease and would approach zero under very good growing conditions.

Because $\log(GCI)=0$ if $GCI=1$, the expected loss cost ratio under normal growing conditions is B_0 in equation (3). In counties where the estimated parameter for B_1 is not significantly different from zero, one can not statistically reject the hypothesis that the loss cost ratio is constant across different observed growing conditions. This rather unintuitive case has implications for analyzing loss experience, as discussed later.

Loss cost data for 12 years (1981-92) are available from the FCIC EXPERSUM data base for estimation. Over this time period, the GCI does not necessarily have a mean of 1.0, as the growing conditions incurred by a county/crop program during this shorter time period may deviate from that expected based on the 37 years of NASS data used to estimate equation (1). This specification using the 37 years of yield data is based on the presumption that a longer time series will better capture the possible weather events and the associated probabilities than the shorter 12-year series.

Computing the Normalized Expected Loss Ratio

The normalized loss ratio for year t is obtained by dividing the expected loss cost ratio by the aggregate premium rate for the county in year t . Equation 4 illustrates this procedure:

$$(4) B_0 = E(\text{loss cost}) = E(\text{indemnity/liability})$$

$$(5) E(\text{loss ratio}) = E(\text{loss cost}) * (1 / \text{premium rate})_t$$

$$= B_0 * (\text{liability} / \text{premiums})_t$$

This normalized ratio is the loss ratio that would be expected to occur under normal growing conditions, given the premium rates charged in that year. If the normalized expected loss ratio is greater than 1.0, then the program would not be actuarially sound in that county even under normal weather conditions, as defined by the 37 observed county yields. This suggests that the FCIC should direct actions to improve actuarial soundness in areas where normalized expected loss ratios are highest.

Investigation is also warranted in cases where the slope coefficient, B_1 , is not significant in equation (3), meaning that losses do not respond to changes in growing conditions. If the loss ratio is equal to, or less than, 1.0, then actuarial soundness is maintained despite the lack of response to growing conditions. However, if the loss ratio is above 1.0, then the county/crop program is actuarially unsound and will be expected to incur excessive losses even under normal or better growing conditions.

While this model identifies counties where the relationship between the loss cost ratio and the GCI is weak, it does not give any indication of why this situation occurs. It may be because the insured acreage in the county is atypical for the county as a whole. This implies that the county GCI is not an accurate measure of growing conditions for the insured acres and would be more likely to occur where participation rates are low. Another factor is moral hazard. If producers are collecting indemnities under good growing conditions, then it may be that their own actions, and not uncontrolled events, are causing the losses.

Results

Using the above method, comparisons can be made between the normalized expected loss ratio and historical loss ratios at both the county and aggregate level.^{5/} These comparisons allow examination of whether normalization creates a significantly different measure of actuarial soundness than can be computed with raw data.

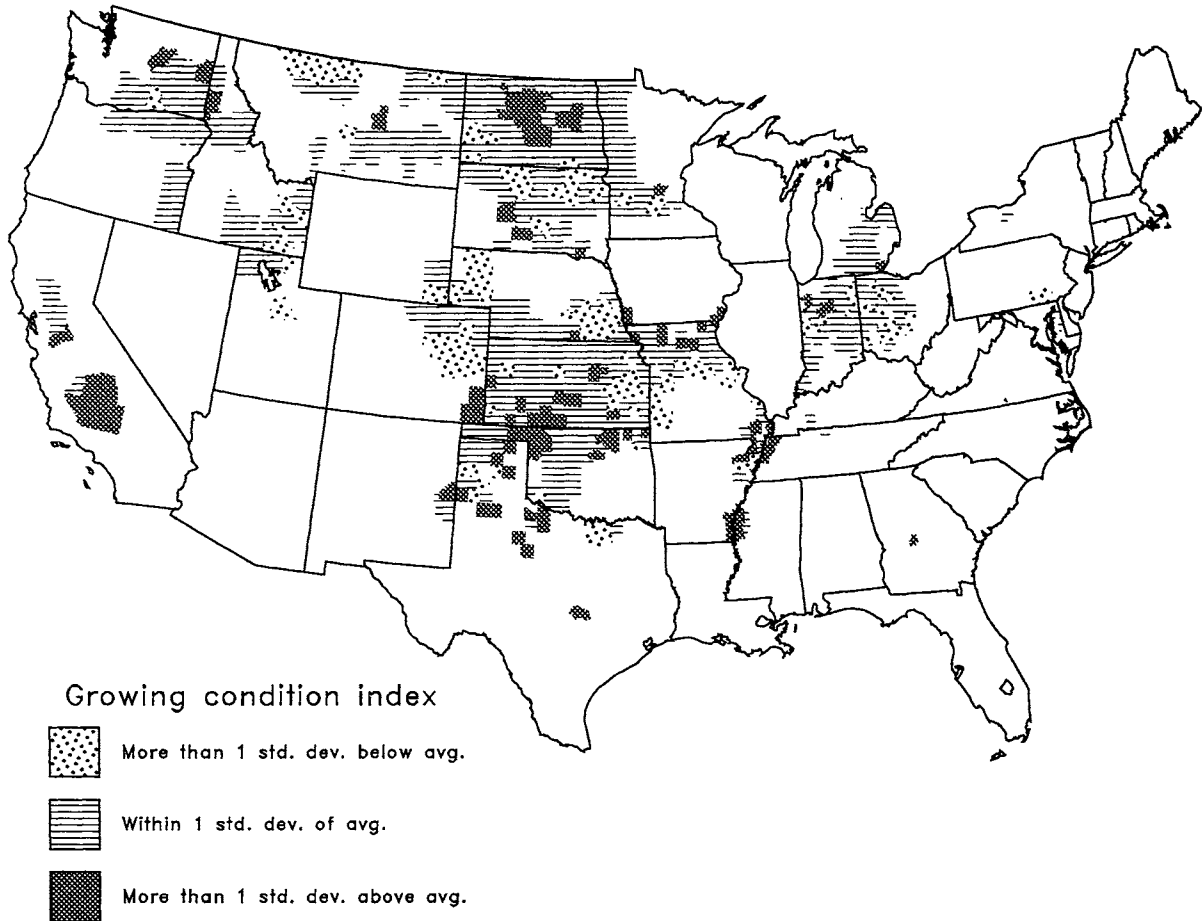
Growing Condition Index Results

A weighted average GCI is computed for each county across the 1981-92 period. Whether growing conditions in the county over the 1981-92 period were significantly better or worse than normal is indicated by the GCI being greater or less than 1.0 standard deviation above or below average. As

^{5/} All aggregate measures, across time for a county and across counties for the crop program, are weighted by proportion of premiums. This weighting factor is used to maintain consistency with the amount of MPC business associated with the disaggregate unit.

Figure A-2

Wheat Growing Condition Index, 1981-92 Weighted Average



shown in figure A-2, average growing conditions vary significantly from one county to the next.

Using Kansas wheat as an example, several counties with below normal GCI's--indicating relatively poorer weather over the 1981-92 period than the 37-year history--are clustered adjacent to counties with above-normal conditions. This situation likely results from the aggregation of disparate growing

conditions over the 12-year period used in the analysis, or may represent geographic variability common on the Great Plains. In a given year, growing conditions would be expected to be similar over wider geographic areas than when longer time series are examined.

Analysis of Normalized Loss Ratios Prior to 1993

In figure A-3, the aggregate normalized loss ratio for wheat during the 1981-92 period is plotted along with the GCI and the actual loss ratio incurred. From this figure it can be seen that the Federal costs for wheat crop insurance have been above actuarially sound levels throughout the study period. Actuarial soundness, as measured by the normalized loss ratio, generally worsened through the early 1980's, peaking near 1.5 in 1986.

Since that time, the normalized loss ratio for wheat has declined, although it remained above 1.0 in 1992. Reductions in the normalized loss ratio in many areas were caused by rate increases, particularly in the late 1980's.

Figure A-3
Normalized and Actual Loss Ratios Compared to GCI Ratio

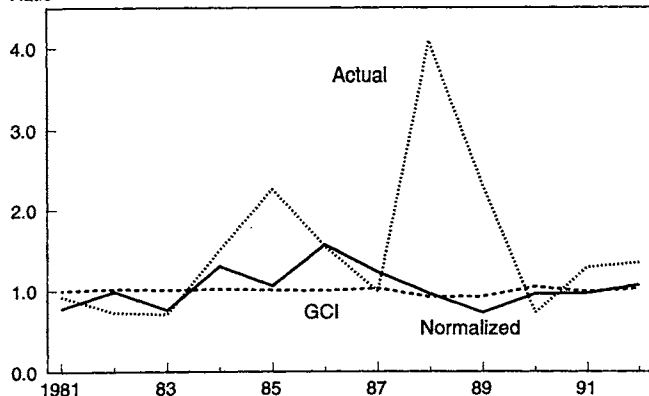
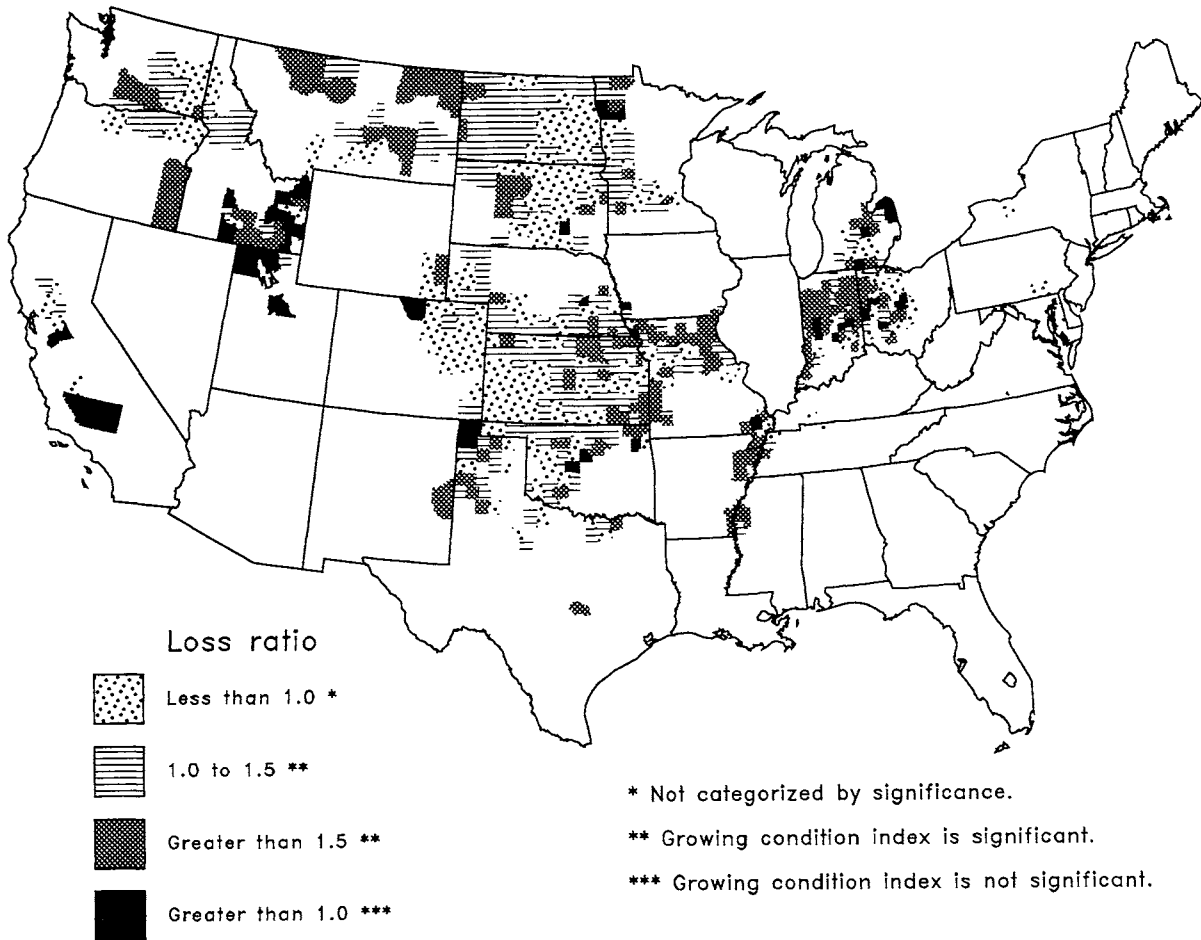


Figure A-4

Normalized Expected Loss Ratio for Wheat, 1993



Normalized Expected Loss Ratio Results for 1993

Although 1993 indemnities are not yet final, the 1993 normalized expected loss ratio may be computed from preliminary premium and liability data. To address whether the normalization process produces substantially different results from the unadjusted expected loss ratio (historical loss cost ratio/current premium rates), both were computed for the 1993 crop year (table A-2).

One striking feature of these results is the high number of wheat counties which exhibit an expected loss ratio greater than 1.5 in both the unadjusted and normalized calculations. The normalized loss ratio indicates that these counties would, even under normal weather, have high loss ratios, and that policy-related adjustments, such as rate increases, are warranted. For wheat, nearly 25 percent (155) of the counties fall into this category. Thirty-seven counties fall into the "GCI not significant" categories, with 22 counties having a loss ratio greater than 1.5. Again, the insignificant GCI counties tend to be counties with low participation. A map of the county-level normalized loss ratio results is shown in figure A-4.

Table A-2--Comparison of 1993 unadjusted and normalized expected loss ratio

Unadjusted expected loss ratio	Normalized expected loss ratio				
	Less than 1.0*	GCI is significant 1.0 to 1.5	Greater than 1.5	GCI not significant 1.0 to 1.5	Greater than 1.5
Less than 1.0	147** (187.4)	12 (65.1)	5 (1.8)	4 (27.3)	1 (0.5)
1.0 to 1.5	69 (234.4)	135 (272.4)	14 (72.7)	10 (55.6)	2 (21.5)
Greater than 1.5	13 (183.9)	72 (262.2)	155 (146.6)	1 (3.7)	19 (52.5)

* Not categorized by GCI significance
 ** Number of counties in category. Values in parenthesis are the average premiums (\$1000) for the county in 1993.

Table A-3--Comparison of alternative actuarial soundness measures

Number of counties	Weighted aggregate unadjusted expected loss ratio	Weighted aggregate normalized expected loss ratio	Weighted aggregate historical loss ratio
659	1.41	1.18	1.55

Total crop aggregates for the unadjusted and normalized alternatives, as well as the historical loss ratios, are reported in table A-3. While all three measures provide an indication of actuarial soundness, differences in computation produce differing results in many cases. The unadjusted and normalized expected loss ratios use current premium rates, with the normalization removing the effects of weather. The historical loss ratio differs in that the premiums used in the denominator vary for each year.

The aggregate results for wheat indicate that the program is actuarially unsound, even though the normalized loss ratio is lower than the unadjusted ratio. From the normalized estimate, it can be concluded that although weather in the study area influenced the historical measure of actuarial soundness, this does not fully account for poor actuarial performance.

Conclusions

The results of this study demonstrate that, in some cases, extraordinary growing conditions have influenced traditional actuarial soundness measures. Not surprisingly, the effect of

growing conditions on actuarial measures is not consistent. Comparisons of the aggregate unadjusted and normalized expected loss ratios show that the normalized ratio is lower by 0.23--1.41 versus 1.18.

While this method is less naive than most other measures of actuarial soundness in that an attempt is made to explicitly take into account growing conditions, numerous assumptions were made to keep the analysis manageable. Thus, this measure would provide another tool to assess MPCCI performance, but it is not necessarily a definitive solution to examining MPCCI loss experience.

The primary limitation of this method is that many counties were not included because of a lack of data. The counties that were sampled are obviously not completely representative of the crop insurance program as a whole. To overcome this difficulty, shorter yield series or more aggregate data (e. g., crop reporting district) might be used to represent all counties, but would introduce error into the estimates that does not currently exist.

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Appendix table 1--Wheat: Estimated acreage, yield, and production, 1965-93

Year	Planted	Harvested	Yield	Production	Planted	Harvested	Yield	Production
	--1,000 acres--	--1,000 acres--	Bushels per acre	1,000 bushels	--1,000 acres--	--1,000 acres--	Bushels per acre	1,000 bushels
	-----All wheat-----				-----Durum wheat-----			
1965	57,361	49,560	26.5	1,315,603	2,361	2,296	30.4	69,866
1966	54,105	49,613	26.3	1,304,889	2,491	2,423	25.9	62,638
1967	67,264	58,353	25.8	1,507,598	2,826	2,754	24.1	66,443
1968	61,860	54,765	28.4	1,556,635	3,715	3,621	27.5	99,644
1969	53,450	47,146	30.6	1,442,679	3,466	3,420	31.7	108,403
1970	48,739	43,564	31.0	1,351,558	2,167	2,105	25.1	52,771
1971	53,822	47,685	33.9	1,618,636	2,943	2,864	32.1	91,805
1972	54,913	47,303	32.7	1,546,209	2,592	2,550	28.6	72,912
1973	59,254	54,148	31.6	1,710,787	2,952	2,884	27.2	78,455
1974	71,044	65,368	27.3	1,781,918	4,174	4,099	19.8	81,245
1975	74,900	69,499	30.6	2,126,927	4,830	4,680	26.4	123,362
1976	80,395	70,927	30.3	2,148,780	4,748	4,584	29.4	134,914
1977	75,410	66,686	30.7	2,045,527	3,183	3,025	26.4	79,964
1978	65,989	56,495	31.4	1,775,524	4,110	4,024	33.1	133,328
1979	71,424	62,454	34.2	2,134,060	4,042	3,932	27.1	106,654
1980	80,788	71,125	33.5	2,380,934	5,525	4,840	22.4	108,395
1981	88,251	80,642	34.5	2,785,357	5,776	5,655	32.4	183,040
1982	86,232	77,937	35.5	2,764,967	4,290	4,177	34.9	145,863
1983	76,419	61,390	39.4	2,419,824	2,565	2,492	29.3	72,979
1984	79,213	66,928	38.8	2,594,777	3,277	3,219	32.1	103,439
1985	75,535	64,704	37.5	2,424,115	3,207	3,094	36.4	112,510
1986	71,998	60,688	34.4	2,090,570	2,994	2,877	34.0	97,907
1987	65,829	55,945	37.7	2,107,685	3,341	3,279	28.2	92,617
1988	65,529	53,189	34.1	1,812,201	3,336	2,847	15.7	44,831
1989	76,615	62,189	32.7	2,036,618	3,791	3,673	25.1	92,229
1990	77,241	69,283	39.5	2,736,428	3,570	3,507	34.9	122,430
1991	69,921	57,703	34.3	1,981,139	3,253	3,197	32.5	103,957
1992	72,264	62,411	39.4	2,458,948	2,507	2,449	39.7	97,196
1993	72,208	62,647	38.3	2,402,055	2,191	2,050	33.6	68,926
	-----Winter wheat-----				-----Other spring wheat-----			
1965	45,142	37,586	27.1	1,017,075	9,858	9,678	23.6	228,662
1966	42,746	38,616	27.4	1,057,371	8,868	8,574	21.6	184,880
1967	53,649	45,039	26.5	1,194,119	10,789	10,560	23.4	247,036
1968	48,667	41,929	29.0	1,217,555	9,478	9,215	26.0	239,436
1969	42,338	36,303	31.2	1,131,439	7,646	7,423	27.3	202,837
1970	37,623	32,702	33.4	1,091,744	8,949	8,757	23.6	207,043
1971	38,072	32,370	35.4	1,145,011	12,807	12,451	30.7	381,820
1972	42,183	34,859	34.0	1,186,498	10,138	9,894	29.0	286,799
1973	43,501	38,747	33.0	1,278,220	12,801	12,517	28.3	354,112
1974	52,023	46,778	29.4	1,375,526	14,847	14,491	22.4	325,147
1975	55,954	51,376	32.0	1,642,900	14,116	13,443	26.8	360,665
1976	57,822	49,578	31.5	1,564,118	17,825	16,765	26.8	449,748
1977	56,469	48,772	31.6	1,540,419	15,758	14,889	28.6	425,144
1978	47,549	38,491	31.8	1,222,446	14,330	13,980	30.0	419,750
1979	51,787	43,427	36.9	1,601,234	15,595	15,095	28.2	426,172
1980	57,771	51,635	36.8	1,902,011	17,492	14,650	25.3	370,528
1981	65,547	58,476	35.9	2,097,057	16,928	16,511	30.6	505,260
1982	65,516	57,633	36.0	2,073,560	16,426	16,127	33.8	545,544
1983	62,105	47,584	41.8	1,988,304	11,749	11,314	31.7	358,541
1984	63,419	51,513	40.0	2,060,266	12,517	12,196	35.3	431,072
1985	57,712	47,923	38.1	1,826,625	14,616	13,687	35.4	484,980
1986	53,895	43,170	35.2	1,520,433	15,109	14,641	32.3	472,230
1987	48,806	39,332	39.8	1,565,381	13,682	13,334	33.7	449,687
1988	48,800	39,800	39.2	1,561,910	13,393	10,542	19.5	205,460
1989	55,091	41,509	35.0	1,454,642	17,733	17,007	28.8	489,747
1990	56,948	49,901	40.7	2,030,874	16,723	15,875	36.7	583,124
1991	51,064	39,406	34.8	1,372,617	15,604	15,100	33.4	504,565
1992	51,057	41,893	38.3	1,606,534	18,700	18,069	41.8	755,218
1993	51,727	43,846	40.3	1,769,158	18,290	16,751	33.7	563,971

Source: National Agricultural Statistics Service, USDA.

Appendix table 2--Wheat classes: Production, 1950-93

Crop year	All wheat	Hard red winter	Hard red spring	Soft red winter	White winter	White spring	Eastern white 1/	Durum
Million bushels								
1950	1,019.3	458.9	207.0	162.5	153.0	NA	NA	37.9
1951	988.2	382.3	256.0	148.1	166.3	NA	NA	35.5
1952	1,306.5	722.9	181.4	193.4	185.7	NA	NA	23.1
1953	1,173.0	504.4	216.8	231.2	206.8	NA	NA	13.8
1954	984.0	488.9	145.3	184.5	160.3	NA	NA	5.0
1955	937.1	415.4	184.0	174.9	143.2	NA	NA	19.6
1956	1,005.3	446.0	177.7	187.7	155.1	NA	NA	38.8
1957	955.7	429.3	168.6	154.6	163.3	NA	NA	39.9
1958	1,457.5	836.4	232.8	192.2	174.4	NA	NA	21.7
1959	1,117.8	619.4	150.5	156.3	171.4	NA	NA	20.2
1960	1,354.7	794.4	187.9	189.8	127.2	21.0	NA	34.4
1961	1,232.4	753.8	116.5	201.5	119.5	19.7	NA	21.3
1962	1,092.0	535.2	178.7	155.6	132.1	20.1	NA	70.3
1963	1,146.8	543.9	167.9	218.3	151.9	13.4	NA	51.4
1964	1,283.4	634.8	179.8	222.4	163.8	14.4	NA	68.2
1965	1,315.6	673.9	209.1	183.2	160.0	19.5	NA	69.9
1966	1,304.9	677.0	174.8	215.0	165.4	10.1	NA	62.6
1967	1,507.6	703.4	230.0	270.2	220.6	17.0	NA	66.4
1968	1,556.6	801.7	228.9	218.1	197.7	10.6	NA	99.6
1969	1,442.7	788.6	189.7	185.2	157.7	13.1	24.1	108.4
1970	1,351.6	755.1	197.8	174.2	162.4	9.3	20.3	52.8
1971	1,618.6	747.8	366.4	211.9	185.3	15.4	19.2	91.8
1972	1,546.2	761.7	275.9	226.4	198.4	10.9	23.1	72.9
1973	1,710.8	961.2	328.2	161.4	155.7	25.8	21.2	78.5
1974	1,781.9	882.6	293.1	272.7	220.3	32.0	36.6	81.2
1975	2,126.9	1,054.8	327.3	330.9	257.2	33.3	36.5	123.4
1976	2,148.8	977.4	411.9	337.4	249.4	37.8	31.4	134.9
1977	2,045.5	996.4	399.1	349.1	194.9	26.1	29.2	80.0
1978	1,775.5	829.9	379.7	188.9	203.6	40.1	16.5	133.3
1979	2,134.1	1,091.6	368.8	309.6	200.0	57.4	29.3	106.7
1980	2,380.9	1,181.3	311.4	441.8	278.9	59.1	33.0	108.4
1981	2,785.4	1,112.1	463.8	678.0	307.1	41.5	38.1	183.0
1982	2,765.0	1,243.6	492.7	588.9	241.1	52.9	20.9	145.9
1983	2,419.8	1,197.8	322.7	504.2	286.2	35.8	35.0	73.0
1984	2,594.8	1,250.6	408.8	531.4	278.3	22.3	43.2	103.4
1985	2,424.1	1,230.1	460.2	367.4	229.1	24.8	44.2	112.5
1986	2,090.6	1,017.2	451.4	292.0	211.2	20.8	32.4	97.9
1987	2,107.7	1,019.2	430.6	349.5	196.7	19.1	17.6	92.6
1988	1,812.2	881.9	181.2	472.7	207.4	24.3	24.4	44.8
1989	2,036.6	711.0	433.5	548.9	194.7	56.3	32.4	92.2
1990	2,736.4	1,198.8	554.7	547.1	285.0	28.4	NA	122.4
1991	1,981.1	901.8	431.2	325.2	145.6	73.3	NA	104.0
1992	2,458.9	966.1	702.1	427.1	213.3	53.1	NA	97.2
1993	2,402.1	1,073.4	510.0	402.7	293.0	54.0	NA	68.9

NA = Not available.

1/ White wheat grown in Michigan, New York, and Wisconsin; total included in white winter; 1950-68 included in white winter.

Source: National Agricultural Statistics Service, USDA.

Appendix table 3--Wheat classes: Acreage, percentage breakdown by State, 1991-93 1/

State	Hard red			Winter Soft red			White			Spring 2/			White		
	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
	Percent														
Alabama	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Arizona	100	100	100	--	--	--	--	--	--	--	--	--	--	--	--
Arkansas	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
California	93	90	90	--	--	--	7	10	10	--	--	--	--	--	--
Colorado	100	100	100	--	--	--	--	--	--	84	84	84	16	16	16
Delaware	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Florida	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Georgia	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Idaho	20	29	10	--	--	--	80	71	90	38	30	16	62	70	84
Illinois	2	2	2	98	98	98	--	--	--	--	--	--	--	--	--
Indiana	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Iowa	70	70	70	30	30	30	--	--	--	--	--	--	--	--	--
Kansas	98	99	99	2	1	1	--	--	--	--	--	--	--	--	--
Kentucky	6	6	4	94	94	96	--	--	--	--	--	--	--	--	--
Louisiana	2	2	2	98	98	98	--	--	--	--	--	--	--	--	--
Maryland	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Michigan	--	--	--	28	28	28	72	72	72	--	--	--	--	--	--
Minnesota	100	100	100	--	--	--	--	--	--	100	100	100	--	--	--
Mississippi	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Missouri	3	3	3	97	97	97	--	--	--	--	--	--	--	--	--
Montana	99	99	99	--	--	--	1	1	1	100	100	99	--	--	1
Nebraska	100	100	100	--	--	--	--	--	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	100	100	100	12	12	12	88	88	88
New Jersey	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
New Mexico	100	100	100	--	--	--	--	--	--	--	--	--	--	--	--
New York	1	1	1	2	2	2	97	97	97	--	--	--	--	--	--
North Carolina	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
North Dakota	100	100	100	--	--	--	--	--	--	100	100	100	--	--	--
Ohio	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Oklahoma	99	99	99	1	1	1	--	--	--	--	--	--	--	--	--
Oregon	1	1	1	--	--	--	99	99	99	30	15	10	70	85	90
Pennsylvania	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
South Carolina	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
South Dakota	100	100	100	--	--	--	--	--	--	100	100	100	--	--	--
Tennessee	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Texas	94	94	94	6	6	6	--	--	--	--	--	--	--	--	--
Utah	93	93	93	--	--	--	7	7	7	71	71	71	29	29	29
Virginia	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Washington	5	5	10	--	--	--	95	95	90	13	20	20	87	80	80
West Virginia	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Wisconsin	--	--	--	93	93	93	7	7	7	100	100	100	--	--	--
Wyoming	100	100	100	--	--	--	--	--	--	100	97	97	--	3	3

-- = Not applicable.

1/ Acreage percentages are based on a variety acreage survey collected at 5-year intervals from all wheat-producing States, adjusted as other variety survey information becomes available to USDA's Agricultural Statistics Board. The percentages are used for U.S. wheat class production estimates and forecasts. 2/ Excludes durum.

Source: National Agricultural Statistics Service, USDA.

Appendix table 4--Wheat classes: Estimated acreage, yield, and production, 1981-94 1/

Year	Planted acreage	Harvested acreage	Yield	Production
	---Million acres---		Bu./acre	Million bushels
Hard red winter:				
1981	43.4	37.9	29.34	1,112.1
1982	43.2	37.0	33.61	1,243.6
1983	41.3	30.2	39.66	1,197.8
1984	43.6	34.1	36.67	1,250.6
1985	42.5	34.5	35.66	1,230.1
1986	39.4	31.5	32.29	1,017.2
1987	36.3	28.6	35.64	1,019.2
1988	34.4	26.8	32.91	881.9
1989	37.5	26.1	27.21	711.0
1990	38.0	32.6	36.75	1,198.8
1991	35.5	27.4	32.97	901.8
1992	36.3	29.3	32.96	966.1
1993	36.4	30.1	35.66	1,073.4
1994	35.8	NA	NA	NA
Hard red spring:				
1981	16.1	15.8	29.35	463.8
1982	15.5	15.2	32.41	492.7
1983	11.1	10.7	30.16	322.7
1984	12.0	11.7	34.94	408.8
1985	14.0	13.1	35.13	460.2
1986	14.6	14.1	32.02	451.4
1987	13.3	13.0	33.12	430.6
1988	13.0	10.1	17.94	181.2
1989	16.5	15.9	27.34	433.5
1990	16.2	15.4	36.08	554.7
1991	14.0	13.5	31.93	431.2
1992	17.8	17.2	40.87	702.1
1993	17.4	16.0	31.95	510.0
1994	NA	NA	NA	NA
Durum:				
1981	5.8	5.7	32.11	183.0
1982	4.3	4.2	34.74	145.9
1983	2.6	2.5	29.20	73.0
1984	3.3	3.2	32.31	103.4
1985	3.2	3.1	36.29	112.5
1986	3.0	2.9	33.76	97.9
1987	3.3	3.3	28.07	92.6
1988	3.3	2.8	15.75	44.8
1989	3.8	3.7	25.11	92.2
1990	3.6	3.5	34.91	122.4
1991	3.3	3.2	32.52	104.0
1992	2.5	2.4	39.69	97.2
1993	2.2	2.1	33.62	68.9
1994	NA	NA	NA	NA
Soft red winter:				
1981	16.7	15.3	44.31	678.0
1982	17.2	15.8	37.27	588.9
1983	15.6	12.8	39.39	504.2
1984	14.5	12.6	42.17	531.4
1985	10.6	9.1	40.38	367.4
1986	10.1	7.7	37.92	292.0
1987	9.0	7.6	45.98	349.5
1988	10.9	9.6	49.24	472.7
1989	13.4	12.0	45.79	548.9
1990	14.2	12.8	42.89	547.1
1991	11.4	9.5	34.41	325.2
1992	10.5	8.6	49.42	427.1
1993	10.7	9.3	43.13	402.7
1994	10.3	NA	NA	NA
White:				
1981	6.2	6.0	58.08	348.5
1982	6.0	5.7	51.58	294.0
1983	5.9	5.3	60.75	322.0
1984	5.8	5.3	56.72	300.6
1985	5.3	4.9	51.82	253.9
1986	4.9	4.5	51.56	232.0
1987	3.9	3.5	61.65	215.8
1988	4.0	3.8	60.95	231.6
1989	5.4	4.5	55.78	251.0
1990	5.2	5.0	62.28	313.4
1991	5.9	4.2	52.26	219.0
1992	5.2	4.8	55.21	266.4
1993	5.4	5.2	66.76	347.0
1994	4.5 *	NA	NA	NA

NA = Not available.

1/ Data for 1994 based on winter wheat seedlings. * Winter only, up 5 percent from 1993.

Source: National Agricultural Statistics Service and Economic Research Service (estimates), USDA.

Appendix table 5--Wheat: Marketing year supply and disappearance, 1960/61-1993/94 1/

Year beginning June 1	Supply				Disappearance						Ending stocks May 31		
	Begin- ning stocks	Pro- duction	Imports 2/	Total	Domestic use				Exports 2/	Total disap- pearance	Gov't. owned	Pri- vately owned 4/	Total
					Food	Seed	Feed 3/	Total					
Million bushels													
1960/61	1,384.2	1,354.7	8.1	2,747.0	496.5	64.3	30.4	591.0	653.5	1,244.5	1,224.6	277.8	1,502.4
1961/62	1,502.4	1,232.4	5.9	2,740.7	504.0	56.3	44.0	604.4	715.7	1,320.1	1,074.4	346.2	1,420.6
1962/63	1,420.6	1,092.0	5.3	2,517.9	502.7	61.4	34.7	598.8	649.4	1,248.2	1,101.8	167.9	1,269.7
1963/64	1,269.7	1,146.8	4.0	2,420.6	487.9	64.9	28.6	581.5	845.6	1,427.1	799.8	193.7	993.5
1964/65	993.5	1,283.4	1.8	2,278.7	514.4	65.5	54.9	634.9	722.7	1,357.6	634.8	286.3	921.1
1965/66	921.1	1,315.6	0.9	2,237.6	517.9	61.5	145.9	725.3	851.8	1,577.1	299.2	361.3	660.5
1966/67	660.5	1,304.9	1.7	1,967.1	505.1	77.4	100.5	683.1	771.3	1,454.3	122.0	390.8	512.8
1967/68	512.8	1,507.6	1.0	2,021.4	517.8	71.3	36.8	625.8	765.3	1,391.2	100.1	530.1	630.2
1968/69	630.2	1,556.6	1.1	2,187.9	522.4	60.8	156.5	739.7	544.2	1,283.9	139.5	764.5	904.0
1969/70	904.0	1,442.7	2.9	2,349.5	520.1	55.5	188.4	764.0	603.0	1,367.0	277.2	705.4	982.6
1970/71	982.6	1,351.6	1.4	2,335.7	517.1	62.1	193.0	772.1	740.8	1,512.9	352.6	470.2	822.8
1971/72	822.8	1,618.6	1.1	2,442.5	523.7	63.2	262.4	849.3	609.8	1,459.1	355.1	628.3	983.4
1972/73	983.4	1,546.2	1.3	2,530.9	531.8	67.4	199.5	798.7	1,135.1	1,933.8	6.3	590.8	597.1
1973/74	597.1	1,710.8	2.6	2,310.5	544.3	84.0	125.1	753.4	1,217.0	1,970.4	0.6	339.5	340.1
1974/75	340.1	1,781.9	3.4	2,125.4	545.0	92.0	34.9	671.9	1,018.5	1,690.4	NA	435.0	435.0
1975/76	435.0	2,126.9	2.4	2,564.3	588.5	100.0	37.3	725.8	1,172.9	1,898.7	NA	665.6	665.6
1976/77	665.6	2,148.8	2.7	2,817.1	588.0	92.0	74.4	754.4	949.5	1,703.9	NA	1,113.2	1,113.2
1977/78	1,113.2	2,045.5	1.9	3,160.6	586.5	80.0	192.5	859.0	1,123.8	1,982.8	48.3	1,129.5	1,177.8
1978/79	1,177.8	1,775.5	1.9	2,955.2	592.4	87.0	157.5	836.9	1,194.2	2,031.1	51.1	873.0	924.1
1979/80	924.1	2,134.1	2.1	3,060.3	596.1	101.0	85.9	783.0	1,375.3	2,158.3	187.8	714.2	902.0
1980/81	902.0	2,380.9	2.5	3,285.4	610.5	113.0	59.0	782.5	1,513.8	2,296.3	199.7	789.4	989.1
1981/82	989.1	2,785.4	2.8	3,777.3	602.4	110.0	134.8	847.2	1,770.7	2,617.9	190.3	969.1	1,159.4
1982/83	1,159.4	2,765.0	7.6	3,932.0	616.4	97.0	194.8	908.2	1,508.7	2,416.9	192.0	1,323.1	1,515.1
1983/84	1,515.1	2,419.8	3.8	3,938.8	642.6	100.0	371.2	1,113.8	1,426.4	2,540.2	188.0	1,210.6	1,398.6
1984/85	1,398.6	2,594.8	9.4	4,002.8	651.0	98.0	407.1	1,156.1	1,421.4	2,577.6	377.6	1,047.6	1,425.2
1985/86	1,425.2	2,424.1	16.3	3,865.6	674.3	93.0	284.2	1,051.5	909.1	1,960.7	601.7	1,303.3	1,905.0
1986/87	1,905.0	2,090.6	21.3	4,016.8	712.2	84.0	401.2	1,197.4	998.5	2,195.9	830.1	990.8	1,820.9
1987/88	1,820.9	2,107.7	16.1	3,944.7	720.7	85.0	290.2	1,096.0	1,587.9	2,683.8	283.0	977.8	1,260.8
1988/89	1,260.8	1,812.2	22.7	3,095.7	725.8	103.0	150.5	979.2	1,414.9	2,394.1	190.5	511.1	701.6
1989/90	701.6	2,036.6	23.4	2,761.7	748.9	104.6	139.8	993.3	1,232.0	2,225.2	116.6	419.9	536.5
1990/91	536.5	2,736.4	36.4	3,309.3	785.5	92.9	496.4	1,374.9	1,068.5	2,443.3	162.7	703.2	865.9
1991/92	865.9	1,981.1	41.3	2,888.3	789.2	97.8	249.5	1,136.6	1,279.9	2,416.5	152.0	319.9	471.9
1992/93	471.9	2,458.9	70.0	3,000.8	829.2	98.2	190.6	1,118.1	1,353.6	2,471.6	150.0	379.2	529.2
1993/94 5/	529.2	2,402.1	95.0	3,026.2	840.0	98.0	275.0	1,213.0	1,225.0	2,438.0	150.0	438.2	588.2

NA = Not available.

1/ Totals might not add because of rounding. 2/ Imports and exports include flour and other products expressed in wheat equivalent.

3/ Residual; approximates feed use and includes negligible quantities used for distilled spirits. 4/ Includes outstanding and reserve loans.

5/ Projected.

Appendix table 6--Wheat: Quarterly supply and disappearance, 1978/79-1993/94 1/

Year and periods beginning June 1	Supply				Disappearance						Ending stocks		
	Begin- ning stocks	Pro- duction	Imports 2/	Total	Domestic use				Exports 2/	Total disap- pearance	Gov't. owned	Pri- vately owned 4/	Total
					Food	Seed	Feed 3/	Total					
1978/79:													
June-Aug.	1,177.8	1,775.5	0.6	2,953.9	145.2	1.0	80.8	227.0	366.8	593.8	49.4	2,310.7	2,360.1
Sept.-Nov.	2,360.1	---	0.5	2,360.6	151.8	58.0	33	242.8	342.2	585.0	50.0	1,725.6	1,775.6
Dec.-Feb.	1,775.6	---	0.4	1,776.0	145.9	2.0	21.4	169.3	238.0	407.3	50.3	1,318.4	1,368.7
Mar.-May	1,368.7	---	0.4	1,369.1	149.5	26.0	22.3	197.8	247.2	445.0	51.1	873.0	924.1
Mkt. year	1,177.8	1,775.5	1.9	2,955.2	592.4	87.0	157.5	836.9	1,194.2	2,031.1	51.1	873.0	924.1
1979/80:													
June-Aug.	924.1	2,134.1	0.6	3,058.8	150.1	1.0	38.1	189.2	374.6	563.8	49.9	2,445.1	2,495.0
Sept.-Nov.	2,495.0	---	0.6	2,495.6	159.3	66.0	-8.5	216.8	402.8	619.6	49.9	1,826.1	1,876.0
Dec.-Feb.	1,876.0	---	0.5	1,876.5	148.4	3.0	31.1	182.5	301.5	484.0	49.5	1,343.0	1,392.5
Mar.-May	1,392.5	---	0.4	1,392.9	138.3	31.0	25.2	194.5	296.4	490.9	187.8	714.2	902.0
Mkt. year	924.1	2,134.1	2.1	3,060.3	596.1	101.0	85.9	783.0	1,375.3	2,158.3	187.8	714.2	902.0
1980/81:													
June-Aug.	902.0	2,380.9	0.8	3,283.7	144.2	2.0	48.1	194.3	375.4	569.7	202.1	2,511.9	2,714.0
Sept.-Nov.	2,714.0	---	0.6	2,714.6	162.1	76.0	4.9	243.0	379.3	622.3	202.9	1,889.4	2,092.3
Dec.-Feb.	2,092.3	---	0.6	2,092.9	158.8	4.0	8.1	170.9	399.2	570.1	203.2	1,319.6	1,522.8
Mar.-May	1,522.8	---	0.5	1,523.3	145.4	31.0	-2.1	174.3	359.9	534.2	199.7	789.4	989.1
Mkt. year	902.0	2,380.9	2.5	3,285.4	610.5	113.0	59	782.5	1,513.8	2,296.3	199.7	789.4	989.1
1981/82													
June-Aug.	989.1	2,785.4	0.7	3,775.2	149.2	1.0	144.9	295.1	424.1	719.2	195.4	2,860.6	3,056.0
Sept.-Nov.	3,056.0	---	0.8	3,056.8	161.7	78.0	-7.1	232.6	485.8	718.4	190.6	2,147.8	2,338.4
Dec.-Feb.	2,338.4	---	0.7	2,339.1	150.1	4.0	-7.6	146.5	415.0	561.5	190.2	1,587.4	1,777.6
Mar.-May	1,777.6	---	0.6	1,778.2	141.4	27.0	4.6	173.0	445.8	618.8	190.3	969.1	1,159.4
Mkt. year	989.1	2,785.4	2.8	3,777.3	602.4	110.0	134.8	847.2	1,770.7	2,617.9	190.3	969.1	1,159.4
1982/83:													
June-Aug.	1,159.4	2,765.0	1.2	3,925.6	152.9	1.0	131.3	285.2	411.1	696.3	193.3	3,036.0	3,229.3
Sept.-Nov.	3,229.3	---	3.0	3,232.3	159.5	74.0	18.8	252.3	337.2	589.5	189.7	2,453.1	2,642.8
Dec.-Feb.	2,642.8	---	2.6	2,645.4	152.4	3.0	24.2	179.6	393.8	573.4	184.6	1,887.4	2,072.0
Mar.-May	2,072.0	---	0.8	2,072.8	151.6	19.0	20.5	191.1	366.6	557.7	192.0	1,323.1	1,515.1
Mkt. year	1,159.4	2,765.0	7.6	3,932.0	616.4	97.0	194.8	908.2	1,508.7	2,416.9	192.0	1,323.1	1,515.1
1983/84:													
June-Aug.	1,515.1	2,419.8	0.7	3,935.6	158.7	1.0	196.1	355.8	346.7	702.5	365.0	2,868.1	3,233.1
Sept.-Nov.	3,233.1	---	0.9	3,234.0	163.1	75.0	100.5	338.6	359.7	698.3	375.8	2,159.9	2,535.7
Dec.-Feb.	2,535.7	---	1.1	2,536.8	166.8	3.0	48.3	218.1	367.1	585.3	313.8	1,637.7	1,951.5
Mar.-May	1,951.5	---	1.1	1,952.6	154.0	21.0	26.2	201.2	352.8	554.0	188.0	1,210.6	1,398.6
Mkt. year	1,515.1	2,419.8	3.8	3,938.8	642.6	100.0	371.2	1,113.8	1,426.4	2,540.2	188.0	1,210.6	1,398.6
1984/85:													
June-Aug.	1,398.6	2,594.8	3.8	3,997.2	157.8	1.0	279.6	438.4	398.7	837.1	278.1	2,882.0	3,160.1
Sept.-Nov.	3,160.1	---	2.2	3,162.3	168.5	69.0	101.5	339.0	484.8	823.8	359.4	1,979.1	2,338.5
Dec.-Feb.	2,338.5	---	1.1	2,339.6	164.2	4.0	35.5	203.7	335.1	538.8	375.7	1,414.7	1,800.8
Mar.-May	1,800.8	---	2.3	1,803.1	160.5	24.0	-9.5	175.0	202.9	377.9	377.6	1,047.6	1,425.2
Mkt. year	1,398.6	2,594.8	9.4	4,002.8	651.0	98.0	407.1	1,156.1	1,421.4	2,577.6	377.6	1,047.6	1,425.2
1985/86:													
June-Aug.	1,425.2	2,424.1	5.1	3,854.4	165.8	1.0	235.5	402.3	248.6	650.9	406.7	2,796.8	3,203.5
Sept.-Nov.	3,203.5	---	5.1	3,208.6	185.6	63.0	65.9	314.4	250.7	565.2	517.1	2,126.3	2,643.4
Dec.-Feb.	2,643.4	---	2.7	2,646.1	162.2	4.0	1.8	168.0	222.3	390.3	526.3	1,729.5	2,255.8
Mar.-May	2,255.8	---	3.5	2,259.3	160.8	25.0	-18.9	166.8	187.4	354.3	601.7	1,303.3	1,905.0
Mkt. year	1,425.2	2,424.1	16.3	3,865.6	674.3	93.0	284.2	1,051.5	909.1	1,960.7	601.7	1,303.3	1,905.0

See footnotes at end of table.

Continued--

Appendix table 6--Wheat: Quarterly supply and disappearance, 1978/79-1993/94--Continued 1/

Year and periods beginning June 1	Supply				Disappearance						Ending stocks		
	Begin-ning stocks	Pro-duction	Imports 2/	Total	Domestic use				Exports 2/	Total disap-pearance	Gov't. owned	Pri-vately owned 4/	Total
					Food	Seed	Feed 3/	Total					
Million bushels													
1986/87:													
June-Aug.	1,905.0	2,090.6	4.3	3,999.9	171.2	1.0	352.3	524.4	318.9	843.3	793.8	2,362.7	3,156.5
Sept.-Nov.	3,156.5	---	3.6	3,160.1	192.8	57.0	-20.8	229.0	257.7	486.7	863.9	1,809.6	2,673.5
Dec.-Feb.	2,673.5	---	6.0	2,679.5	171.7	3.0	48.7	223.4	205.7	429.1	905.3	1,345.1	2,250.4
Mar.-May	2,250.4	---	7.3	2,257.7	176.6	23.0	20.9	220.5	216.3	436.8	830.1	990.8	1,820.9
Mkt. year	1,905.0	2,090.6	21.3	4,016.8	712.2	84.0	401.2	1,197.4	998.5	2,195.9	830.1	990.8	1,820.9
1987/88:													
June-Aug.	1,820.9	2,107.7	2.7	3,931.3	181.0	1.0	363.8	545.8	409.0	954.8	798.8	2,189.7	2,976.5
Sept.-Nov.	2,976.5	---	4.5	2,981.0	193.0	58.0	-79.1	172.0	308.5	480.4	755.4	1,750.5	2,500.6
Dec.-Feb.	2,500.6	---	3.7	2,504.3	172.1	3.0	-7.3	167.7	413.0	580.8	450.1	1,473.4	1,923.5
Mar.-May	1,923.5	---	5.1	1,928.7	174.6	23.0	12.8	210.4	457.4	667.8	283.0	977.8	1,260.8
Mkt. year	1,820.9	2,107.7	16.1	3,944.7	720.7	85.0	290.2	1,096.0	1,587.9	2,683.8	283.0	977.8	1,260.8
1988/89:													
June-Aug.	1,260.8	1,812.2	8.6	3,081.6	183.3	1.0	282.2	466.4	361.6	828.1	250.0	2,003.6	2,253.6
Sept.-Nov.	2,253.6	---	6.3	2,259.8	197.3	67.0	-49.4	214.9	329.0	543.9	213.0	1,502.9	1,715.9
Dec.-Feb.	1,715.9	---	3.7	1,719.6	173.4	3.0	-44.5	131.9	360.0	491.9	203.2	1,024.5	1,227.7
Mar.-May	1,227.7	---	4.2	1,231.9	171.8	32.0	-37.8	166.0	364.2	530.2	190.5	511.1	701.6
Mkt. year	1,260.8	1,812.2	22.7	3,095.7	725.8	103.0	150.5	979.2	1,414.9	2,394.1	190.5	511.1	701.6
1989/90:													
June-Aug.	701.6	2,036.6	5.9	2,744.1	190.7	1.7	264.9	457.4	368.7	826.1	167.9	1,750.1	1,918.0
Sept.-Nov.	1,918.0	---	7.1	1,925.2	191.6	70.6	-88.1	174.1	328.6	502.7	154.5	1,268.0	1,422.5
Dec.-Feb.	1,422.5	---	4.7	1,427.1	184.3	2.7	37.4	224.4	259.6	484.0	136.5	806.6	943.1
Mar.-May	943.1	---	5.8	948.9	182.3	29.6	-74.5	137.4	275.1	412.4	116.6	419.9	536.5
Mkt. year	701.6	2,036.6	23.4	2,761.7	748.9	104.6	139.8	993.3	1,232.0	2,225.2	116.6	419.9	536.5
1990/91:													
June-Aug.	536.5	2,736.4	8.0	3,280.9	193.9	1.7	406.6	602.1	268.9	871.0	104.6	2,305.3	2,409.9
Sept.-Nov.	2,409.9	---	13.4	2,423.3	209.0	62.9	-34.2	237.8	277.2	515.0	129.9	1,778.4	1,908.3
Dec.-Feb.	1,908.3	---	7.8	1,916.0	191.0	2.1	101.2	294.3	225.5	519.8	152.5	1,243.8	1,396.3
Mar.-May	1,396.3	---	7.2	1,403.5	191.6	26.3	22.8	240.7	293.0	537.6	162.7	703.2	865.9
Mkt. year	536.5	2,736.4	36.4	3,309.3	785.5	92.9	496.4	1,374.9	1,068.5	2,443.3	162.7	703.2	865.9
1991/92:													
June-Aug.	865.9	1,981.1	7.8	2,854.9	189.3	1.2	371.9	562.4	251.7	814.1	162.8	1,877.9	2,040.7
Sept.-Nov.	2,040.7	---	7.2	2,047.9	213.0	62.4	-34.0	241.4	363.0	604.4	160.7	1,282.8	1,443.5
Dec.-Feb.	1,443.5	---	10.8	1,454.3	192.7	2.4	-0.2	195.0	372.2	567.1	156.9	730.3	887.2
Mar.-May	887.2	---	15.4	902.7	194.2	31.8	-88.2	137.8	293.0	430.8	152.0	319.9	471.9
Mkt. year	865.9	1,981.1	41.3	2,888.3	789.2	97.8	249.5	1,136.6	1,279.9	2,416.5	152.0	319.9	471.9
1992/93:													
June-Aug.	471.9	2,458.9	19.7	2,950.5	211.4	1.4	347.4	560.3	282.6	842.9	151.6	1,956.0	2,107.6
Sept.-Nov.	2,107.6	---	16.8	2,124.5	218.8	63.4	-93.1	189.0	345.0	534.0	151.1	1,439.4	1,590.5
Dec.-Feb.	1,590.5	---	17.4	1,607.8	194.9	2.6	10.7	208.2	356.3	564.5	150.4	892.9	1,043.3
Mar.-May	1,043.3	---	16.1	1,059.4	204.1	30.8	-74.3	160.6	369.7	530.3	150.0	379.2	529.2
Mkt. year	471.9	2,458.9	70.0	3,000.8	829.2	98.2	190.6	1,118.1	1,353.6	2,471.6	150.0	379.2	529.2
1993/94: 5/													
June-Aug.	529.2	2,402.1	14.6	2,945.8	206.7	1.3	310.9	518.9	300.7	819.6	149.9	1,976.3	2,126.2
Sept.-Nov.	2,126.2	---	30.1	2,156.3	220.9	62.7	-42.7	240.9	329.2	570.2	150.3	1,435.8	1,586.1
Dec.-Feb.	1,586.1	---	---	---	---	---	---	---	---	---	---	---	---
Mar.-May	---	---	---	---	---	---	---	---	---	---	---	---	---
Mkt. year	529.2	2,402.1	95.0	3,026.2	840.0	98.0	275.0	1,213.0	1,225.0	2,438.0	150.0	438.2	588.2

--- = Not applicable.

1/ Totals might not add because of rounding. 2/ Imports and exports include flour and other products expressed in wheat equivalent. 3/ Residual; approximates feed use and includes negligible quantities used for distilled spirits. 4/ Includes outstanding and reserve loans. 5/ Projected.

Appendix table 7--Wheat: Farm prices, support prices, and ending stocks, 1950/51-1994/95

Crop year	Ending stocks				Price received	Loan rate	Target price	Direct payment
	CCC	FOR 1/	Free	Total 2/				
-----Million bushels-----				-----\$/bushel-----				
1950/51	160	---	332	492	2.00	1.99	---	---
1951/52	82	---	247	330	2.11	2.18	---	---
1952/53	292	---	380	672	2.09	2.20	---	---
1953/54	714	---	279	994	2.04	2.21	---	---
1954/55	971	---	139	1,109	2.12	2.24	---	---
1955/56	922	---	209	1,130	1.98	2.08	---	---
1956/57	808	---	196	1,004	1.97	2.00	---	---
1957/58	813	---	149	962	1.93	2.00	---	---
1958/59	1,084	---	284	1,368	1.75	1.82	---	---
1959/60	1,198	---	186	1,384	1.76	1.81	---	---
1960/61	1,225	---	278	1,502	1.74	1.78	---	---
1961/62	1,074	---	346	1,421	1.83	1.79	---	---
1962/63	1,102	---	168	1,270	2.04	2.00	---	---
1963/64	800	---	194	993	1.85	1.82	---	4/ 0.18
1964/65	635	---	286	921	1.37	1.30	---	5/ 0.70
1965/66	299	---	361	660	1.35	1.25	---	0.75
1966/67	122	---	391	513	1.63	1.25	---	1.32
1967/68	100	---	530	630	1.39	1.25	---	1.36
1968/69	140	---	765	904	1.24	1.25	---	1.38
1969/70	277	---	705	983	1.25	1.25	---	1.52
1970/71	353	---	470	823	1.33	1.25	---	1.57
1971/72	355	---	628	983	1.34	1.25	---	1.63
1972/73	6	---	591	597	1.76	1.25	---	1.34
1973/74	1	---	340	340	3.95	1.25	---	0.68
1974/75	---	---	435	435	4.09	1.37	2.05	---
1975/76	---	---	666	666	3.56	1.37	2.05	---
1976/77	---	---	1,113	1,113	2.73	2.25	2.29	---
1977/78	48	342	788	1,178	2.33	2.25	2.90	0.65
1978/79	51	393	481	924	2.98	2.35	3.40	0.52
1979/80	188	260	454	902	3.80	2.50	3.40	---
1980/81 *	200	360	429	989	3.99	3.00	3/ 3.63	---
1981/82 *	190	562	407	1,159	3.69	3.20	3.81	6/ 0.15
1982/83 *	192	1,061	262	1,515	3.45	3.55	4.05	0.50
1983/84 *	188	611	600	1,399	3.51	3.65	4.30	0.65
1984/85 *	378	7/ 654	393	1,425	3.39	3.30	4.38	1.00
1985/86 *	602	7/ 433	870	1,905	3.08	3.30	4.38	1.08
1986/87 *	830	7/ 463	528	1,821	2.42	2.40	4.38	1.98
1987/88 *	283	467	511	1,261	2.57	2.28	4.38	1.81
1988/89 *	190	287	225	702	3.72	2.21	4.23	0.69
1989/90 *	117	144	275	536	3.72	2.06	4.10	0.32
1990/91 *	163	14	689	866	2.61	1.95	4.00	1.28
1991/92 *	152	50	270	472	3.00	2.04	4.00	8/ 1.35
1992/93 *	150	28	351	529	3.24	2.21	4.00	0.81
1993/94 * 9/	150	5	433	588	3.10-3.25	2.45	4.00	1.03
1994/95 * 9/	NA	NA	NA	NA	NA	NA	4.00	NA

--- = Not applicable.

NA = Not available.

* Includes food security reserve. 1/ Farmer-owned reserve. 2/ Totals might not add because of rounding.

3/ Growers who planted in excess of their normal crop acreage were eligible for a target price of \$3.08 a bushel. 4/ Price support payment. 5/ Value of domestic marketing certificate, 1964/65-1973/74.

6/ Deficiency payment, 1981/82 to date. 7/ Includes special producer storage loan program. 8/ Winter wheat option 1.25. 9/ Projected.

Appendix table 8--Wheat: Status of price support loans on specified dates, 1977/78-1993/94

Crop year	Total stocks	Total CCC inventory	Outstanding CCC loans	Farmer-owned reserve 1/	Unencumbered stocks
Million bushels					
1977/78:					
Jun. 1	1,113.2	0.1	378.2	0.0	734.9
Sept. 1	2,631.7	7.8	715.4	10.4	1,898.1
Dec. 1	2,139.4	29.0	724.0	44.5	1,341.9
Mar. 1	1,706.6	39.1	590.9	100.2	976.4
1978/79:					
Jun. 1	1,177.8	48.3	266.3	341.7	521.5
Sept. 1	2,360.1	49.4	184.0	389.7	1,737.0
Dec. 1	1,775.6	50.0	188.9	407.2	1,129.5
Mar. 1	1,368.7	50.3	170.6	411.2	736.6
1979/80:					
Jun. 1	924.1	51.1	121.7	403.1	348.2
Sept. 1	2,495.0	49.9	94.3	259.8	2,091.0
Dec. 1	1,876.0	49.9	141.4	233.8	1,450.9
Mar. 1	1,392.5	49.5	133.1	240.2	969.7
1980/81:					
Jun. 1	902.0	187.8	99.3	259.9	355.0
Sept. 1	2,714.0	202.1	96.7	211.0	2,204.2
Dec. 1	2,092.3	202.9	128.2	210.5	1,550.7
Mar. 1	1,522.8	203.2	114.3	303.8	901.5
1981/82:					
Jun. 1	989.1	199.7	54.6	359.6	375.2
Sept. 1	3,056.0	195.4	147.0	398.6	2,315.0
Dec. 1	2,338.4	190.6	195.4	459.1	1,493.3
Mar. 1	1,777.6	190.2	182.2	515.2	890.0
1982/83:					
Jun. 1	1,159.4	190.3	112.0	560.4	296.7
Sept. 1	3,229.3	193.3	77.5	763.3	2,195.2
Dec. 1	2,642.8	189.7	105.6	986.3	1,361.2
Mar. 1	2,072.0	184.6	92.5	1,117.1	677.8
1983/84:					
Jun. 1	1,515.1	192.0	65.2	1,060.6	197.3
Sept. 1	3,233.1	365.0	294.1	824.8	1,749.2
Dec. 1	2,535.7	375.8	396.0	736.6	1,027.3
Mar. 1	1,951.5	313.8	443.9	610.7	583.1
1984/85:					
Jun. 1	1,398.6	188.0	379.1	611.2	220.3
Sept. 1	3,160.1	278.1	254.9	657.9	1,969.2
Dec. 1	2,338.5	359.4	247.2	674.9	1,057.0
Mar. 1	1,800.8	375.7	218.4	673.8	532.9
1985/86:					
Jun. 1	1,425.2	377.6	175.0	657.1	215.5
Sept. 1	3,203.5	406.7	493.7	689.5	1,613.6
Dec. 1	2,643.4	517.1	734.9	653.7	737.7
Mar. 1	2,255.8	526.3	770.8	633.1	325.6
1986/87:					
Jun. 1	1,905.0	601.7	677.7	596.4	29.2
Sept. 1	3,156.5	793.8	455.8	629.9	1,277.0
Dec. 1	2,673.5	863.9	527.6	657.7	624.3
Mar. 1	2,250.4	905.3	419.8	662.6	262.7
1987/88:					
Jun. 1	1,820.9	830.1	235.6	631.8	123.4
Sept. 1	2,976.5	798.8	245.1	597.5	1,335.1
Dec. 1	2,500.6	755.4	383.1	553.4	808.7
Mar. 1	1,923.5	450.1	293.8	517.9	661.7
1988/89:					
Jun. 1	1,260.8	283.0	177.5	466.8	333.5
Sept. 1	2,253.6	250.0	108.1	391.0	1,504.5
Dec. 1	1,715.9	213.0	93.1	381.2	1,028.6
Mar. 1	1,227.7	203.2	46.9	377.9	599.7
1989/90:					
Jun. 1	701.6	190.5	19.2	287.0	204.9
Sept. 1	1,918.0	167.9	48.2	211.4	1,490.5
Dec. 1	1,422.5	154.5	80.4	173.6	1,014.0
Mar. 1	943.1	136.5	65.4	153.6	587.6
1990/91:					
Jun. 1	536.5	116.6	30.0	143.9	246.0
Sept. 1	2,409.9	104.6	120.3	118.8	2,066.2
Dec. 1	1,908.3	129.9	260.9	64.6	1,452.9
Mar. 1	1,396.3	152.5	328.6	19.1	896.1
1991/92:					
Jun. 1	865.9	162.7	216.8	13.7	472.7
Sept. 1	2,040.7	162.8	149.1	76.1	1,652.7
Dec. 1	1,443.5	160.7	105.3	126.7	1,050.8
Mar. 1	887.2	156.9	47.3	85.2	597.8
1992/93:					
Jun. 1	471.9	152.0	19.8	49.9	250.2
Sept. 1	2,107.6	151.6	76.8	37.4	1,841.8
Dec. 1	1,590.5	151.1	181.2	36.0	1,222.2
Mar. 1	1,043.3	150.4	120.4	33.0	739.5
1993/94:					
Jun. 1	529.2	150.0	47.3	28.1	303.8
Sept. 1	2,126.2	149.9	103.3	21.5	1,851.5
Dec. 1	1,586.1	150.3	192.5	19.1	1,224.2

1/ Includes any quantity in the special producer storage loan program.

Source: Agricultural Stabilization and Conservation Service, USDA.

Appendix table 9--Wheat classes: Marketing year supply and disappearance, 1976/77-1993/94 1/

Year beginning June 1	Supply			Disappearance			Ending stocks May 31
	Beginning stocks	Pro- duction	Total 2/	Domestic use	Exports	Total	
Million bushels							
1976/77:							
Hard winter	376	978	1,354	330	418	748	606
Hard spring	116	412	529	155	124	279	250
Soft red	61	337	398	145	181	326	72
White	60	287	347	68	186	254	93
Durum	53	135	189	56	41	97	92
All classes	666	2,149	2,817	754	950	1,704	1,113
1977/78:							
Hard winter	606	997	1,603	436	535	971	632
Hard spring	250	399	650	159	156	315	335
Soft red	72	349	421	153	197	350	71
White	93	221	314	67	174	241	73
Durum	92	80	173	44	62	106	67
All classes	1,113	2,046	3,161	859	1,124	1,983	1,178
1978/79:							
Hard winter	632	830	1,462	429	610	1,039	423
Hard spring	335	380	715	163	232	395	320
Soft red	71	189	260	138	95	233	27
White	73	243	316	63	185	248	68
Durum	67	133	202	44	72	116	86
All classes	1,178	1,775	2,955	837	1,194	2,031	924
1979/80:							
Hard winter	423	1,092	1,515	350	725	1,075	440
Hard spring	320	369	690	188	217	405	285
Soft red	27	309	336	142	154	296	40
White	68	257	325	53	196	249	76
Durum	86	107	194	50	83	133	61
All classes	924	2,134	3,060	783	1,375	2,158	902
1980/81:							
Hard winter	440	1,181	1,621	379	701	1,080	541
Hard spring	285	312	598	153	188	341	257
Soft red	40	442	482	145	299	444	38
White	76	338	414	54	267	321	93
Durum	61	108	171	52	59	111	60
All classes	902	2,381	3,286	783	1,514	2,297	989
1981/82:							
Hard winter	541	1,112	1,653	361	754	1,115	538
Hard spring	257	464	722	171	205	376	346
Soft red	38	678	716	196	460	656	60
White	93	348	441	62	270	332	109
Durum	60	183	245	57	82	139	106
All classes	989	2,785	3,777	847	1,771	2,618	1,159
1982/83:							
Hard winter	538	1,243	1,781	348	679	1,027	754
Hard spring	346	492	842	195	239	434	408
Soft red	60	590	650	251	325	576	74
White	109	294	403	53	207	260	143
Durum	106	146	256	61	59	120	136
All classes	1,159	2,765	3,932	908	1,509	2,417	1,515
1983/84:							
Hard winter	754	1,198	1,952	503	704	1,207	745
Hard spring	408	323	732	198	220	418	314
Soft red	74	504	578	284	220	504	74
White	143	322	465	78	220	298	167
Durum	136	73	212	51	62	113	99
All classes	1,515	2,420	3,938	1,114	1,426	2,540	1,399
1984/85:							
Hard winter	745	1,251	1,996	564	715	1,279	717
Hard spring	314	409	727	172	183	355	372
Soft red	74	531	605	289	252	541	64
White	167	301	469	86	210	296	173
Durum	99	103	206	45	61	106	100
All classes	1,399	2,595	4,003	1,156	1,421	2,578	1,425

See footnotes at end of table.

Continued--

Appendix table 9--Wheat classes: Marketing year supply and disappearance, 1976/77-1993/94 1/--Continued

Year beginning June 1	Supply			Disappearance			Ending stocks May 31
	Beginning stocks	Pro- duction	Total 2/	Domestic use	Exports	Total	
Million bushels							
1985/86:							
Hard winter	717	1,230	1,947	545	393	938	1,009
Hard spring	372	460	842	179	165	344	498
Soft red	64	367	431	204	148	352	79
White	173	254	428	80	150	230	198
Durum	100	113	217	42	53	95	121
All classes	1,425	2,424	3,866	1,052	909	1,961	1,905
1986/87:							
Hard winter	1,009	1,017	2,026	624	429	1,053	973
Hard spring	498	451	957	268	199	467	490
Soft red	79	292	371	180	114	294	77
White	198	232	437	77	175	252	185
Durum	121	98	225	49	82	131	95
All classes	1,905	2,091	4,017	1,197	999	2,196	1,821
1987/88 :							
Hard winter	973	1,019	1,992	524	901	1,425	567
Hard spring	490	431	925	268	255	523	402
Soft red	77	349	427	192	160	352	75
White	185	216	403	59	210	269	135
Durum	95	93	197	53	62	115	83
All classes	1,821	2,108	3,945	1,096	1,588	2,684	1,261
1988/89:							
Hard winter	567	882	1,449	507	639	1,146	302
Hard spring	402	181	590	177	194	371	219
Soft red	75	473	547	193	315	508	39
White	135	232	370	43	247	290	81
Durum	83	45	139	59	20	79	60
All classes	1,261	1,812	3,096	979	1,415	2,394	702
1989/90 :							
Hard winter	302	711	1,013	439	359	798	215
Hard spring	219	433	660	225	280	505	155
Soft red	39	549	588	212	345	557	32
White	81	251	335	57	193	250	85
Durum	60	92	165	60	55	115	50
All classes	702	2,037	2,762	993	1,232	2,225	536
1990/91:							
Hard winter	215	1,199	1,414	685	368	1,054	360
Hard spring	155	555	717	239	201	440	277
Soft red	32	547	579	269	230	499	80
White	85	313	408	105	216	321	87
Durum	50	122	192	76	53	129	62
All classes	536	2,736	3,309	1,375	1,068	2,443	866
1991/92:							
Hard winter	360	902	1,262	511	557	1,068	194
Hard spring	277	431	724	217	380	597	128
Soft red	80	325	405	259	105	364	41
White	87	219	311	65	193	258	54
Durum	62	104	185	86	45	131	55
All classes	866	1,981	2,888	1,137	1,280	2,416	472
1992/93:							
Hard winter	194	966	1,161	493	464	957	204
Hard spring	128	702	864	256	438	694	170
Soft red	41	427	468	216	210	426	43
White	54	266	329	70	195	265	64
Durum	55	97	179	83	47	130	49
All classes	472	2,459	3,001	1,118	1,354	2,472	529
1993/94: 3/							
Hard winter	204	1,073	1,278	523	475	998	281
Hard spring	170	510	736	282	275	557	179
Soft red	43	403	445	225	185	410	36
White	64	347	419	108	240	348	72
Durum	49	69	148	77	50	127	21
All classes	529	2,402	3,026	1,213	1,225	2,438	588

1/ Data, except production, are approximations. Imports and exports include flour and products in wheat equivalent. 2/ Total supply includes imports. 3/ Projected.

Appendix table 10--U.S. wheat exports: Grain, flour, and products, by month, 1973/74-1993/94 1/

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total
1,000 bushels													
Wheat (grain only)													
1973/74	125,910	110,095	139,912	132,527	122,270	120,508	89,469	83,185	72,848	65,678	55,802	55,119	1,173,323
1974/75	57,188	82,885	91,984	86,187	91,332	98,332	82,568	108,443	71,904	65,191	77,129	65,345	978,838
1975/76	77,583	99,988	111,446	125,943	123,763	118,614	92,462	92,069	72,517	77,353	77,111	67,787	136,635
1976/77	66,814	85,619	113,202	110,376	100,532	54,296	57,024	49,447	57,773	52,650	70,233	66,501	884,467
1977/78	77,073	83,657	93,432	110,634	69,107	57,565	87,368	64,819	94,669	105,468	103,286	120,060	1,067,138
1978/79	108,931	106,108	131,921	119,611	115,518	92,392	90,027	70,400	67,106	75,548	76,961	78,306	1,132,829
1979/80	104,607	133,283	117,787	129,617	149,040	108,882	114,879	82,683	89,526	94,735	98,327	88,579	1,311,945
1980/81	96,193	123,598	141,415	137,325	116,948	112,199	132,048	129,981	124,397	128,770	127,652	78,030	1,448,558
1981/82	124,521	138,168	145,428	194,148	156,993	127,495	137,757	124,163	138,719	159,078	148,181	116,496	1,711,147
1982/83	156,914	117,914	124,336	130,992	98,520	94,638	88,457	143,141	146,594	131,134	112,451	96,235	1,441,326
1983/84	113,506	116,701	87,823	119,263	114,810	102,880	128,887	118,357	111,096	118,713	97,132	112,813	1,341,980
1984/85	105,344	133,276	146,187	242,731	137,298	97,283	131,941	106,430	85,493	57,969	67,811	56,588	1,368,352
1985/86	84,264	63,877	86,863	72,210	85,649	82,384	61,853	70,079	70,869	66,236	56,437	46,216	846,936
1986/87	79,497	104,677	114,853	98,234	84,769	59,182	53,837	65,047	67,764	65,529	65,426	64,603	923,419
1987/88	119,769	157,706	112,758	119,945	101,680	71,166	113,609	140,228	143,959	149,146	152,830	147,667	1,530,462
1988/89	121,842	111,498	107,562	127,564	93,153	93,309	100,149	115,846	127,060	141,780	115,916	90,658	1,346,336
1989/90	90,490	137,933	131,176	150,697	89,336	68,664	81,813	78,343	87,647	104,903	84,576	71,572	1,177,152
1990/91	88,235	80,831	93,617	107,786	84,488	76,800	56,444	66,463	91,313	112,809	88,526	81,760	1,029,072
1991/92	59,167	79,319	97,794	94,991	124,155	136,385	112,771	132,413	115,126	103,024	116,850	59,764	1,231,759
1992/93	75,045	96,382	99,290	92,723	132,232	108,235	111,389	111,584	118,607	118,782	126,845	104,540	1,295,653
1993/94	85,874	103,836	100,516	104,723	100,618	112,667	121,900						
Flour (grain equivalent) 2/													
1973/74	2,875	3,613	3,861	4,737	1,498	1,504	2,650	2,925	2,736	2,624	3,067	3,475	35,565
1974/75	3,464	1,979	2,689	1,836	1,232	2,973	3,017	2,817	2,090	1,807	1,589	3,842	30,335
1975/76	2,664	2,627	2,740	2,045	2,113	2,019	1,380	1,149	1,206	1,525	3,212	4,306	26,986
1976/77	5,605	3,052	5,060	6,028	2,861	1,357	988	3,204	5,871	6,522	8,433	4,893	53,874
1977/78	3,803	3,586	3,411	2,893	2,011	2,204	3,446	1,987	3,820	4,464	6,412	5,844	43,881
1978/79	6,426	4,370	5,124	5,109	4,235	1,399	1,617	1,380	3,050	3,355	2,231	6,589	44,885
1979/80	4,280	4,172	6,370	5,336	3,157	2,587	5,351	2,505	3,649	6,970	2,389	2,529	49,295
1980/81	4,230	2,082	5,057	3,774	2,785	2,165	1,739	2,658	5,217	6,353	7,347	4,803	48,209
1981/82	5,794	2,779	3,438	2,496	668	411	902	1,767	8,068	5,775	6,955	5,983	45,036
1982/83	4,577	1,364	3,488	2,508	3,904	2,483	999	3,998	8,865	6,532	10,530	7,521	56,769
1983/84	9,611	8,198	7,849	8,801	8,473	3,504	1,245	2,330	2,344	7,066	7,306	8,148	74,875
1984/85	6,614	4,105	1,166	1,596	3,242	633	941	392	6,297	5,148	6,335	4,020	40,489
1985/86	3,640	2,638	1,638	1,038	1,289	2,902	6,680	3,174	5,521	5,157	6,411	2,381	42,469
1986/87	5,104	4,795	6,675	4,731	5,999	2,332	6,664	6,681	3,676	6,173	6,722	6,365	65,918
1987/88	5,450	6,816	4,749	3,999	3,418	6,746	4,316	6,934	2,556	823	2,463	2,520	50,790
1988/89	7,036	6,400	6,002	2,402	7,908	3,368	6,086	4,108	6,040	3,974	6,469	5,205	64,998
1989/90	896	1,802	5,765	8,916	3,335	6,792	3,597	4,851	3,088	4,430	6,101	3,260	52,834
1990/91	991	2,175	2,782	1,457	2,395	3,357	4,479	2,698	3,809	6,301	3,719	3,525	37,688
1991/92	5,582	5,362	4,207	3,743	1,231	2,222	3,299	2,549	5,549	4,630	3,771	4,579	46,724
1992/93	3,257	5,284	2,856	2,325	3,840	4,641	3,903	2,325	7,744	5,832	7,487	5,285	54,777
1993/94	4,408	3,793	1,811	3,642	3,840	3,416	3,170						

See footnotes at end of table.

Continued--

Appendix table 10--U.S. wheat exports: Grain, flour, and products, by month, 1973/74-1993/94 1/--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total
1,000 bushels													
Wheat products (grain equivalent) 3/													
1973/74	812	372	489	610	426	771	1,379	763	470	487	871	620	8,070
1974/75	354	522	551	751	373	820	1,036	972	1,141	902	904	1,002	9,328
1975/76	1,540	1,275	212	340	955	856	1,395	1,223	89	140	481	754	9,260
1976/77	450	869	1,293	444	1,072	329	1,798	1,426	1,398	540	728	844	11,191
1977/78	788	926	269	1,211	925	952	1,821	1,097	1,164	1,059	942	1,694	12,848
1978/79	1,232	816	1,842	1,829	605	1,480	1,575	1,414	1,457	774	2,305	1,086	16,415
1979/80	772	1,797	1,492	1,483	1,190	1,484	1,334	1,168	378	1,083	836	918	13,935
1980/81	912	1,222	711	1,849	1,284	1,005	1,230	890	1,010	1,114	4,433	1,406	17,067
1981/82	1,827	1,150	1,009	1,037	1,171	1,406	572	1,211	1,875	351	2,246	692	14,547
1982/83	971	465	1,073	984	529	2,604	472	796	492	586	630	935	10,537
1983/84	632	1,075	1,300	578	502	904	1,346	600	939	780	363	503	9,523
1984/85	717	670	587	1,076	429	497	824	1,831	935	916	1,956	2,164	12,600
1985/86	1,984	2,472	1,256	2,097	1,683	1,476	1,543	1,449	1,172	1,103	1,590	1,903	19,727
1986/87	1,052	1,563	685	1,149	896	371	723	670	611	447	542	463	9,173
1987/88	447	751	549	234	364	901	743	423	277	551	1,133	251	6,624
1988/89	421	424	449	490	673	154	557	86	26	110	101	28	3,519
1989/90	54	128	467	74	703	63	51	136	79	86	76	59	1,977
1990/91	94	74	69	471	313	154	62	107	103	95	76	97	1,715
1991/92	85	105	80	84	100	113	121	187	138	128	119	143	1,403
1992/93	144	136	196	140	195	633	475	132	165	141	101	703	3,162
1993/94	110	179	135	130	90	121	111						
Total wheat, flour, and products													
1973/74	129,597	114,080	144,262	137,874	124,194	122,783	93,498	86,873	76,054	68,789	59,740	59,214	1,216,958
1974/75	61,006	85,386	95,224	88,774	94,287	102,125	86,621	112,232	75,135	67,900	79,622	70,189	1,018,501
1975/76	81,787	103,890	114,398	128,328	126,830	121,489	95,237	94,441	73,812	79,018	80,804	72,847	1,172,881
1976/77	72,869	89,540	119,555	116,848	104,465	55,982	59,810	54,077	65,042	59,712	79,394	72,238	949,532
1977/78	81,664	88,169	97,112	114,738	72,043	60,721	92,635	67,903	99,653	110,991	110,640	127,598	1,123,867
1978/79	116,588	111,294	138,888	126,550	120,358	95,271	93,219	73,194	71,612	79,677	81,497	85,981	1,194,129
1979/80	109,659	139,252	125,649	136,436	153,387	112,953	121,564	86,356	93,553	102,788	101,552	92,026	1,375,175
1980/81	101,335	126,902	147,183	142,949	121,017	115,369	135,017	133,529	130,624	136,238	139,432	84,239	1,513,834
1981/82	132,142	142,097	149,875	197,681	158,832	129,312	139,231	127,141	148,662	165,204	157,382	123,171	1,770,730
1982/83	162,462	119,743	128,897	134,485	102,952	99,726	89,928	147,935	155,950	138,252	123,611	104,691	1,508,632
1983/84	123,750	125,974	96,972	128,642	123,785	107,288	131,479	121,287	114,378	126,559	104,801	121,464	1,426,378
1984/85	112,675	138,051	147,940	245,403	140,968	98,414	133,705	108,653	92,725	64,033	76,102	62,771	1,421,442
1985/86	89,888	68,986	89,757	75,344	88,622	86,763	70,075	74,703	77,562	72,495	64,438	50,499	909,131
1986/87	85,654	111,036	122,214	104,114	91,665	61,884	61,224	72,398	72,052	72,148	72,690	71,431	998,511
1987/88	125,666	165,273	118,057	124,178	105,462	78,813	118,668	147,585	146,793	150,520	156,426	150,437	1,587,877
1988/89	129,299	118,322	114,013	130,456	101,734	96,831	106,792	120,040	133,127	145,864	122,486	95,891	1,414,854
1989/90	91,440	139,863	137,408	159,688	93,375	75,519	85,462	83,330	90,814	109,419	90,753	74,891	1,231,962
1990/91	89,320	83,080	96,468	109,714	87,196	80,311	60,985	69,268	95,225	119,205	92,321	85,382	1,068,475
1991/92	64,835	84,786	102,080	98,818	125,487	138,721	116,191	135,149	120,813	107,781	120,740	64,486	1,279,887
1992/93	78,446	101,802	102,342	95,188	136,268	113,509	115,767	114,041	126,517	124,755	134,432	110,527	1,353,594
1993/94	90,392	107,809	102,462	108,495	104,548	116,204	125,181						

1/ Totals might not add because of independent rounding. 2/ Includes meal and groats, and durum. 3/ Includes macaroni, rolled wheat, and bulgar.

Sources: U.S. Bureau of the Census.
USDA/ERS calculations.

Appendix table 11--U.S. wheat imports: Grain, flour and products, by month, 1983/84-1993/94 1/

Crop year	June	July	August	September	October	November	December	January	February	March	April	May	Total
1,000 bushels													
1983/84:													
Grain	0	6	17	27	8	1	0	0	5	4	7	2	78
Flour and products	326	67	283	266	274	355	342	403	336	324	408	379	3,762
Total	326	73	300	293	282	356	342	403	341	328	415	382	3,840
1984/85:													
Grain	1,247	721	734	506	449	33	1	1	10	12	15	1,100	4,829
Flour and products	332	413	357	394	391	419	412	346	349	467	358	374	4,611
Total	1,578	1,134	1,091	900	840	451	412	346	360	479	374	1,474	9,440
1985/86:													
Grain	1,564	1,758	513	2,187	716	1,001	1,120	226	66	194	411	1,655	11,412
Flour and products	482	325	426	389	450	323	414	464	403	419	435	347	4,875
Total	2,046	2,083	939	2,576	1,165	1,325	1,533	690	469	612	846	2,002	16,287
1986/87:													
Grain	968	408	1,791	222	1,088	983	1,776	1,327	1,514	1,353	2,403	1,987	15,821
Flour and products	333	428	373	345	430	570	525	445	436	548	554	443	5,430
Total	1,301	836	2,165	567	1,519	1,553	2,300	1,772	1,950	1,900	2,957	2,430	21,250
1987/88:													
Grain	432	218	559	1,087	940	948	943	460	803	1,131	1,060	1,409	9,989
Flour and products	470	529	501	362	581	607	522	539	455	590	460	480	6,097
Total	902	747	1,060	1,449	1,521	1,555	1,465	999	1,259	1,721	1,520	1,889	16,086
1988/89:													
Grain	1,956	2,372	2,698	1,824	2,094	880	520	819	813	679	958	257	15,870
Flour and products	508	463	586	438	492	539	591	492	428	890	702	669	6,798
Total	2,464	2,835	3,284	2,262	2,586	1,419	1,111	1,311	1,241	1,569	1,660	926	22,668
1989/90:													
Grain	655	641	1,830	785	931	2,785	1,194	985	471	412	864	1,994	13,548
Flour and products	1,024	945	772	863	1,112	672	678	591	732	595	689	1,225	9,899
Total	1,679	1,587	2,602	1,648	2,043	3,457	1,873	1,576	1,203	1,008	1,553	3,219	23,447
1990/91:													
Grain	1,105	842	3,013	3,868	3,776	3,265	2,687	829	1,322	1,327	2,404	1,103	25,540
Flour and products	741	1,393	905	935	784	762	1,278	605	1,032	749	890	763	10,836
Total	1,846	2,234	3,918	4,803	4,560	4,027	3,965	1,434	2,354	2,076	3,294	1,866	36,376
1991/92:													
Grain	1,301	1,419	2,566	355	2,747	1,811	3,529	2,171	2,846	3,129	4,029	5,714	31,617
Flour and products	837	815	858	764	834	718	810	826	640	868	897	787	9,654
Total	2,138	2,234	3,424	1,119	3,581	2,529	4,339	2,997	3,486	3,996	4,926	6,501	41,270
1992/93:													
Grain	4,481	4,662	6,954	5,731	4,706	3,456	6,295	3,715	4,727	4,998	4,267	3,448	57,440
Flour and products	953	1,085	1,584	859	1,044	1,052	1,029	902	686	1,079	1,139	1,146	12,558
Total	5,434	5,747	8,538	6,590	5,750	4,508	7,324	4,617	5,413	6,077	5,406	4,594	69,998
1993/94:													
Grain	2,579	2,048	6,205	7,089	9,544	9,530	8,274						
Flour and products	1,232	1,227	1,304	1,244	1,432	1,282	1,402						
Total	3,810	3,275	7,510	8,333	10,976	10,812	9,676						

1/ Totals might not add because of rounding.

Appendix table 12--Wheat farm programs and participation, 1976-93

Crop year	Target price	Loan rate	Programs			Deficiency payment rate	Diversion payment rate 1/	Participation rate 2/	Program acres idled by			Area planted Mil. acres	Program yield
			Set-aside	Diversion	PIK, 0-50/92				Set-aside	Diversion	PIK, 0-50/92		
			-----1,000 acres-----										
1976	2.29	2.25	---	---	---	---	---	---	0.0	0.0	---	80.4	33.1
1977	2.90	2.25	---	---	---	0.65	---	---	0.0	0.0	---	75.4	32.0
1978	3.40	2.35	20.0	3/ 20	---	0.52	---	63	8,400.0	1,200.0	---	66.0	31.3
1979	3.40	2.50	20.0	3/ 15	---	---	---	51	7,300.0	900.0	---	71.4	32.4
1980	4/ 3.63/3.08	3.00	---	---	---	---	---	---	0.0	0.0	---	80.8	33.7
1981	3.81	3.20	---	---	---	0.15	---	---	0.0	0.0	0.0	88.3	34.6
1982	4.05	3.55	15.0	---	---	0.50	---	48	5,800.0	0.0	0.0	86.2	32.5
1983	4.30	3.65	15.0	---	5/ 10-30	0.65	2.70/95	78	8,770.5	3,503.4	17,742.7	76.4	33.3
1984	4.38	3.30	20.0	10	10-20	1.00	2.70/85	60	9,326.0	5,655.4	3,625.0	79.2	33.0
1985	4.38	3.30	20.0	10	---	1.08	2.70	73	11,911.8	6,879.3	0.0	75.5	35.0
1986	4.38	2.40	22.5	6/ 2.5	7/ 50-92	1.98	1.10/2.00	85	15,799.3	3,939.6	1,275.3	72.0	8/ 35
1987	4.38	2.28	27.5	---	7/ 50-92	1.81	---	88	20,210.3	0.0	3,721.4	65.8	8/ 35
1988	4.23	2.21	27.5	---	9/ 0-92	0.69	---	86	19,216.6	0.0	3,246.3	65.5	34.9
1989	4.10	2.06	10.0	---	9/ 0-92	0.32	---	78	6,119.7	0.0	3,460.8	76.6	34.3
1990	4.00	1.95	10/ 5.0	---	9/ 0-92	1.28	---	83	3,216.2	0.0	5,304.4	77.2	34.1
1991	4.00	2.04	15.0	---	9/ 0-92	11/ 1.25/1.35	---	85	10,111.1	0.0	5,524.5	69.9	34.4
1992	4.00	2.21	5.0	---	9/ 0-92	0.79	---	83	3,280.5	0.0	3,962.2	72.3	34.4
1993	4.00	2.45	0.0	---	9/ 0-92	1.05	---	87	0.0	0.0	533.9	72.2	34.4

1/ For 1978, payment rate per bushel on the normal production from planted acres. For 1983 and 1984, first figure denotes diversion payment rate and the second number is PIK payment percentage. 2/ In years with all dashes producers were eligible for program benefits. For 1978 and 1979 participation = program acreage on complying farms as a percentage of total planted acreage. For 1982 and subsequent years participation = acreage base on complying farms as a percent of total base. 3/ Voluntary set-aside requirement applies to previous year's plantings. 4/ The first entry is the target price applicable to those producers who planted within the farm NCA; the second is for those who planted in excess of the farm NCA. 5/ An alternative for the farmer is withdrawing the whole base from production, with the producer bidding the percentage of program yield up to a maximum of 95 percent. However, bids would not be accepted if they would cause the combined acreage taken out of production under the acreage reduction, cash diversion, and PIK programs to exceed 45 percent of the county's total acreage. 6/ Winter wheat producers have the option of an additional 5 or 10 percent paid land diversion, with a payment rate of \$2.00. 7/ Under the 50-92 rule, growers who plant between 50 and 92 percent of the permitted acreage to feed grains and devote the remaining permitted acres to a conserving use are eligible to receive deficiency payments on 92 percent of the permitted acreage. 8/ Average of the program payment yields for 1981-85 crops, excluding high and low years. 9/ Under the 0-92 rule, growers who plant between 0 and 92 percent of the permitted acreage to feed grains and devote the remaining permitted acres to a conserving use are eligible to receive deficiency payments on 92 percent of the permitted acreage. 10/ Also offered wheat modified programs whereby participants could plant up to 105 percent of their base. 11/ The first entry is the deficiency payment rate for the 1991 winter wheat option; the second entry is for the 1991 standard wheat program.

Appendix table 13--World wheat production, consumption, trade, and ending stocks, 1960/61-1993/94

Crop year 1/	Area harvested	Yield	Production	Consumption	Trade 1/	Ending 2/ stocks	Stocks-to-consumption
	Million hectares	Tons per hectare	-----Million metric tons-----				Percent
1960/61	202.2	1.15	233.5	230.9	41.9	82.8	35.8
1961/62	203.5	1.08	220.1	233.1	46.8	69.9	29.9
1962/63	206.9	1.19	246.8	240.8	44.3	75.8	31.5
1963/64	206.3	1.12	230.4	235.9	56.0	70.3	29.8
1964/65	215.9	1.23	264.9	256.8	52.0	78.5	30.6
1965/66	215.5	1.20	259.3	277.1	61.0	60.7	21.9
1966/67	213.8	1.41	300.7	273.8	56.0	87.6	32.0
1967/68	219.2	1.33	291.9	281.9	51.0	97.7	34.6
1968/69	223.9	1.45	323.8	300.1	45.0	121.3	40.4
1969/70	217.8	1.40	304.0	321.8	50.0	103.5	32.2
1970/71	207.0	1.48	306.5	329.5	55.0	80.5	24.4
1971/72	212.7	1.62	344.1	335.4	52.0	89.2	26.6
1972/73	210.9	1.60	337.5	351.8	69.7	74.9	21.3
1973/74	217.0	1.69	366.1	358.3	63.0	82.7	23.1
1974/75	220.0	1.61	355.2	356.6	64.3	81.4	22.8
1975/76	225.3	1.56	352.7	347.3	66.7	86.7	25.0
1976/77	233.1	1.78	414.4	373.8	63.3	127.3	34.1
1977/78	227.2	1.66	377.9	396.0	72.8	109.2	27.6
1978/79	228.9	1.92	439.0	413.3	72.0	134.8	32.6
1979/80	228.5	1.83	418.4	432.0	86.0	121.2	28.0
1980/81	237.1	1.84	436.2	444.0	94.1	113.9	25.6
1981/82	239.0	1.86	445.1	445.2	101.3	113.7	25.5
1982/83	237.7	1.99	472.8	455.6	98.9	131.1	28.8
1983/84	229.3	2.11	484.4	468.8	103.8	146.6	31.3
1984/85	231.7	2.20	509.0	489.4	106.2	166.2	34.0
1985/86	229.9	2.15	494.9	490.4	84.7	170.6	34.8
1986/87	227.9	2.30	524.1	515.7	90.7	179.1	34.7
1987/88	219.7	2.26	496.0	525.0	112.1	150.1	28.6
1988/89	217.4	2.28	495.0	524.9	102.9	120.2	22.9
1989/90	225.8	2.36	533.0	532.2	102.0	121.0	22.7
1990/91	231.4	2.54	588.1	563.7	101.6	145.4	25.8
1991/92	222.3	2.44	542.5	559.0	108.9	128.8	23.0
1992/93 3/	222.4	2.52	560.3	546.8	109.7	142.3	26.0
1993/94 4/	223.0	2.52	562.4	561.3	100.0	143.5	25.6

1/ July-June year, excludes intra-EC trade. 2/ Ending stocks data are based on an aggregate of differing local marketing years. 3/ Preliminary. 4/ Projected.

Appendix table 14--Wheat production, trade, and ending stocks, world and United States, 1965-93

Year	Production			Exports			Ending stocks		
	World	United States	U.S. share	World 1/	United States	U.S. share	World	United States	U.S. share
	Million bushels		Percent	Million bushels		Percent	Million bushels		Percent
1965	9,528	1,316	13.81	2,241	852	38.00	2,230	661	29.61
1966	11,049	1,305	11.81	2,058	771	37.48	3,219	513	15.93
1967	10,725	1,508	14.06	1,874	765	40.84	3,590	630	17.56
1968	11,898	1,557	13.08	1,653	544	32.91	4,457	904	20.28
1969	11,170	1,443	12.92	1,837	603	32.82	3,803	983	25.84
1970	11,262	1,352	12.00	2,021	741	36.66	2,958	823	27.82
1971	12,644	1,619	12.80	1,911	610	31.92	3,278	983	30.00
1972	12,401	1,546	12.47	2,561	1,135	44.32	2,752	597	21.70
1973	13,452	1,711	12.72	2,315	1,217	52.57	3,039	340	11.19
1974	13,051	1,782	13.65	2,363	1,019	43.11	2,991	435	14.54
1975	12,960	2,127	16.41	2,451	1,173	47.86	3,186	666	20.89
1976	15,227	2,149	14.11	2,326	950	40.82	4,677	1,113	23.80
1977	13,885	2,046	14.73	2,675	1,124	42.01	4,012	1,178	29.35
1978	16,130	1,776	11.01	2,646	1,194	45.14	4,953	924	18.66
1979	15,374	2,134	13.88	3,160	1,375	43.52	4,453	902	20.25
1980	16,028	2,381	14.85	3,458	1,514	43.78	4,185	989	23.63
1981	16,355	2,785	17.03	3,722	1,771	47.57	4,178	1,159	27.75
1982	17,372	2,765	15.92	3,634	1,509	41.52	4,817	1,515	31.45
1983	17,799	2,420	13.60	3,814	1,426	37.40	5,387	1,399	25.96
1984	18,703	2,595	13.87	3,902	1,421	36.43	6,107	1,425	23.34
1985	18,184	2,424	13.33	3,112	909	29.21	6,268	1,905	30.39
1986	19,257	2,091	10.86	3,333	999	29.96	6,581	1,821	27.67
1987	18,225	2,108	11.56	4,119	1,588	38.55	5,515	1,261	22.86
1988	18,188	1,812	9.96	3,781	1,415	37.42	4,417	702	15.89
1989	19,584	2,037	10.40	3,748	1,232	32.87	4,446	536	12.07
1990	21,609	2,736	12.66	3,733	1,068	28.62	5,343	866	16.21
1991	19,933	1,981	9.94	4,001	1,280	31.99	4,733	472	9.97
1992	20,587	2,459	11.94	4,031	1,354	33.58	5,229	529	10.12
1993 2/	20,665	2,402	11.62	3,674	1,225	33.34	5,273	588	11.16

1/ Excludes intra-EC trade. 2/ Preliminary.

Appendix table 15--Wheat: Production and exports, major foreign exporters, and total foreign, 1966-93

Year	Australia		Canada		Argentina		EC-12		Total foreign 1/	
	Prod.	Exports	Prod.	Exports	Prod.	Exports	Prod.	Exports 2/	Prod.	Exports
Million bushels										
1966	467	312	827	515	230	82	1,441	215	9,732	1,375
1967	277	208	593	336	269	81	1,698	271	9,220	1,203
1968	544	234	650	306	211	92	1,718	341	10,340	1,303
1969	387	296	671	346	258	85	1,635	383	9,728	1,448
1970	290	336	332	435	181	36	1,595	220	9,911	1,334
1971	316	286	530	504	209	60	1,867	337	11,026	1,461
1972	242	157	533	577	254	117	1,879	446	10,854	1,515
1973	440	258	594	419	241	58	1,857	436	11,740	1,465
1974	417	315	489	395	219	66	2,053	454	11,270	1,496
1975	440	318	628	450	315	116	1,757	536	10,831	1,545
1976	434	349	867	494	404	217	1,811	404	13,076	1,652
1977	344	298	730	588	209	65	1,742	467	11,838	1,651
1978	665	430	777	480	298	150	2,148	566	14,353	1,893
1979	595	485	631	584	298	175	2,068	658	13,238	2,053
1980	399	352	709	598	286	141	2,375	798	13,649	2,047
1981	601	404	911	678	305	134	2,243	823	13,567	2,190
1982	326	295	982	785	551	363	2,476	807	14,607	2,451
1983	809	501	972	800	468	288	2,474	824	15,377	2,623
1984	686	516	779	645	485	346	3,198	1,046	16,107	2,809
1985	594	589	891	650	312	158	2,776	1,023	15,759	2,616
1986	592	572	1,152	764	328	163	2,801	1,028	17,168	2,759
1987	454	362	953	864	323	136	2,774	1,076	16,116	2,940
1988	517	415	585	457	309	148	2,880	1,185	16,377	2,824
1989	522	396	911	620	373	223	3,015	1,247	17,548	2,986
1990	554	432	1,179	798	401	205	3,113	1,250	18,871	3,245
1991	388	261	1,174	900	363	212	3,322	1,312	17,953	3,241
1992	595	362	1,098	724	356	215	3,120	1,369	18,130	3,158
1993 3/	661	459	1,021	680	349	184	2,961	1,234	18,263	3,024

1/ Aggregate of differing local marketing years including Canada (Aug./Jul.), Australia (Oct./Sept.), Argentina (Dec./Nov.), EC-12 (July/June).
2/ Includes intra-EC trade. 3/ Projected.

Appendix table 16--Wheat and wheat flour: World trade, production, stocks, and use, 1988/89-1993/94 1/

Country or region	1988/89	1989/90	1990/91	1991/92	1992/93 11/	1993/94 12/
----- Million metric tons -----						
Exports:						
Canada	13.5	17.0	20.5	23.3	21.5	18.5
Australia	10.7	10.8	11.8	8.2	9.1	12.1
Argentina	3.5	5.6	4.7	5.5	7.2	5.2
EU 2/	20.6	21.3	20.7	21.9	22.0	18.5
Former USSR 3/	6.0	6.0	8.5	0.6	6.6	7.3
All others	11.0	7.8	7.0	14.3	6.3	5.4
Total non-U.S.	65.3	68.5	73.2	73.8	72.7	67.0
U.S. 4/	37.6	33.5	28.3	35.1	37.0	33.0
World total	102.9	102.0	101.6	108.9	109.7	100.0
Imports:						
EU 2/	2.3	1.6	1.5	1.2	1.5	1.5
Former USSR 3/	21.4	20.4	23.2	22.2	23.7	15.6
Japan	5.4	5.6	5.6	5.8	5.9	6.0
E. Europe 5/	2.1	1.2	1.3	1.1	3.6	2.4
China	15.4	12.8	9.4	15.8	6.7	6.0
Algeria	4.2	4.2	4.6	3.7	3.8	4.3
Brazil	0.8	1.5	2.8	5.3	5.8	5.9
Egypt	7.4	7.3	5.7	5.8	6.0	5.0
South Korea	2.8	2.0	4.2	4.4	3.9	4.8
Morocco	1.4	1.1	1.9	1.5	3.2	3.5
Indonesia	1.7	1.9	2.0	2.5	2.7	2.9
Iran	3.2	5.2	4.0	2.4	3.0	2.9
Philippines	1.2	1.3	1.5	1.7	2.0	2.1
U.S.	0.8	0.6	0.9	1.2	1.9	2.7
All others	32.8	35.3	33.0	34.3	36.0	34.4
World total	102.9	102.0	101.6	108.9	109.7	100.0
Production: 6/						
Canada	15.9	24.8	32.1	31.9	29.9	27.8
Australia	14.1	14.2	15.1	10.6	16.2	18.0
Argentina	8.4	10.2	10.9	9.9	9.7	9.5
EU 2/	78.4	82.0	84.7	90.4	84.9	80.6
Former USSR 7/	78.8	87.2	101.9	72.0	89.4	86.9
E. Europe	41.2	40.8	41.3	38.5	26.4	30.5
China	85.4	90.8	98.2	96.0	101.6	105.0
India	46.2	54.1	49.9	55.1	55.1	56.5
All other foreign	77.3	73.5	79.5	84.2	80.2	82.2
U.S.	49.3	55.4	74.5	53.9	66.9	65.4
World total	495.0	533.0	588.1	542.5	560.3	562.4
Utilization: 8/						
U.S.	26.5	27.0	37.4	30.9	30.4	33.0
Former USSR 9/	94.8	100.2	112.7	101.3	101.3	95.0
China	104.4	104.5	106.0	111.0	109.0	111.5
All other foreign	299.2	300.5	307.6	315.8	306.1	321.8
World total	524.9	532.2	563.7	559.0	546.8	561.3
Stocks, ending: 10/	120.2	121.0	145.4	128.8	142.3	143.5

1/ July-June years. 2/ European Union (formerly EC) includes former East Germany. 3/ Includes intra-trade among the individual FSU countries. 4/ Includes transshipments through Canadian ports; excludes products other than flour. 5/ Excludes former East Germany. 6/ Production data include all harvests occurring within the July-June year shown, except that small-grain crops from the early-harvesting areas of the Northern Hemisphere are moved forward; i.e., the May 1993 harvests in areas such as India, North Africa, and southern United States are actually included in 1993/94 accounting period, which begins July 1, 1993. 7/ "Clean-weight" basis; discounted for excess moisture and foreign material. 8/ Utilization data are based on an aggregate of differing marketing years. For countries for which stock data are not available, utilization estimates represent apparent utilization, i.e., they are inclusive of annual stock-level adjustments. 9/ Use data adjusted for "clean-weight" basis. 10/ Stocks data are based on an aggregate of differing marketing years and should not be construed as representing world stock levels at a fixed point in time. 11/ Estimate as of February 1994. 12/ Projected as of February 1994.

Source: World Grain Situation and Outlook, Foreign Agricultural Service, USDA.

Appendix table 17--Wheat farm prices for leading classes in U.S. regions, 1980/81-1993/94

Crop year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 1/	Feb.	Mar.	Apr.	May	Average	Loan rate
\$/60-pound bushel														
Central and So. Plains (hard winter) 2/														
1980/81	3.49	3.63	3.75	3.86	4.10	4.19	4.01	4.08	3.99	3.83	3.88	3.75	3.88	2.94
1981/82	3.77	3.72	3.68	3.69	3.76	3.87	3.82	3.78	3.74	3.71	3.72	3.66	3.74	3.13
1982/83	3.49	3.37	3.34	3.38	3.36	3.43	3.49	3.51	3.51	3.60	3.71	3.68	3.50	3.47
1983/84	3.49	3.34	3.54	3.59	3.56	3.49	3.45	3.48	3.41	3.48	3.62	3.63	3.51	3.56
1984/85	3.46	3.30	3.42	3.45	3.43	3.41	3.36	3.34	3.34	3.34	3.39	3.25	3.37	3.23
1985/86	3.06	2.90	2.85	3.00	3.07	3.21	3.24	3.16	3.10	3.21	3.33	2.92	3.09	3.23
1986/87	2.38	2.19	2.23	2.26	2.25	2.39	2.43	2.45	2.50	2.49	2.52	2.60	2.39	2.37
1987/88	2.39	2.26	2.29	2.42	2.51	2.58	2.65	2.68	2.74	2.71	2.72	2.91	2.57	2.26
1988/89	3.30	3.36	3.42	3.62	3.72	3.74	3.90	3.90	3.93	4.04	4.03	3.99	3.75	2.21
1989/90	3.84	3.80	3.74	3.74	3.77	3.81	3.87	3.82	3.63	3.50	3.55	3.31	3.70	2.04
1990/91	3.01	2.75	2.53	2.45	2.40	2.34	2.37	2.36	2.38	2.52	2.57	2.60	2.52	1.94
1991/92	2.58	2.54	2.69	2.89	3.15	3.29	3.48	3.63	3.96	3.62	3.68	3.52	3.25	2.00
1992/93	3.43	3.13	2.90	3.07	3.21	3.31	3.37	3.46	3.38	3.34	3.24	2.94	3.23	2.20
1993/94	2.72	2.80	2.82	2.87	3.02	3.29	3.57	3.55						
Corn Belt (soft red winter) 3/														
1980/81	3.58	3.82	4.02	4.19	4.41	4.59	4.50	4.50	4.28	4.03	4.00	3.59	4.13	3.00
1981/82	3.35	3.46	3.36	3.45	3.56	3.68	3.70	3.71	3.40	3.36	3.42	3.23	3.47	3.20
1982/83	3.18	3.08	2.98	2.89	2.75	3.02	3.13	3.18	3.20	3.30	3.29	3.30	3.11	3.56
1983/84	3.25	3.25	3.54	3.49	3.36	3.33	3.43	3.46	3.26	3.38	3.54	3.44	3.40	3.66
1984/85	3.26	3.22	3.29	3.29	3.29	3.40	3.42	3.44	3.39	3.42	3.44	3.19	3.34	3.28
1985/86	3.01	2.94	2.74	2.66	2.77	3.10	3.22	3.18	3.24	3.37	3.42	2.87	3.04	3.28
1986/87	2.40	2.30	2.28	2.27	2.57	2.65	2.73	2.71	2.77	2.85	2.75	2.65	2.58	2.36
1987/88	2.42	2.37	2.41	2.51	2.66	2.74	2.90	3.02	3.07	2.85	2.96	3.08	2.75	2.35
1988/89	3.33	3.39	3.53	3.67	3.84	3.93	4.06	4.13	4.08	4.14	4.00	3.91	3.83	2.33
1989/90	3.80	3.75	3.76	3.82	3.87	3.99	4.01	3.99	3.85	3.76	3.62	3.52	3.81	2.14
1990/91	3.04	2.85	2.66	2.45	2.39	2.34	2.42	2.38	2.36	2.50	2.63	2.68	2.56	2.00
1991/92	2.52	2.38	2.67	2.86	3.12	3.35	3.52	3.52	3.73	3.57	3.40	3.40	3.17	2.09
1992/93	3.41	3.15	2.86	3.07	3.16	3.34	3.44	3.52	3.49	3.48	3.49	3.03	3.29	2.32
1993/94	2.67	2.67	2.72	2.63	2.79	3.03	3.31	3.54						
Northern Plains (spring) 4/														
1980/81	3.82	4.04	3.95	3.96	4.15	4.24	4.18	4.23	4.19	4.15	4.25	4.24	4.12	3.02
1981/82	4.12	3.93	3.70	3.62	3.66	3.74	3.63	3.69	3.67	3.61	3.73	3.69	3.73	3.21
1982/83	3.62	3.59	3.46	3.45	3.44	3.51	3.47	3.45	3.41	3.59	3.79	3.84	3.56	3.57
1983/84	3.81	3.80	3.78	3.69	3.68	3.66	3.59	3.62	3.59	3.68	3.78	3.87	3.71	3.68
1984/85	3.86	3.69	3.52	3.49	3.47	3.46	3.41	3.45	3.46	3.49	3.57	3.56	3.54	3.34
1985/86	3.50	3.30	3.05	3.18	3.36	3.49	3.58	3.51	3.47	3.51	3.57	3.48	3.42	3.34
1986/87	2.81	2.41	2.38	2.34	2.30	2.51	2.59	2.69	2.66	2.63	2.65	2.69	2.55	2.40
1987/88	2.50	2.36	2.37	2.55	2.62	2.66	2.70	2.77	2.78	2.74	2.78	2.95	2.65	2.28
1988/89	3.30	3.62	3.66	3.80	3.83	3.74	3.81	3.92	3.90	3.99	3.96	3.99	3.79	2.21
1989/90	3.89	3.81	3.68	3.59	3.59	3.58	3.60	3.58	3.50	3.47	3.47	3.49	3.60	2.06
1990/91	3.33	2.96	2.57	2.44	2.43	2.39	2.43	2.44	2.43	2.52	2.60	2.64	2.60	1.95
1991/92	2.57	2.47	2.51	2.69	2.97	3.18	3.44	3.56	3.83	3.79	3.82	3.85	3.22	2.04
1992/93	3.88	3.62	3.12	3.19	3.18	3.29	3.25	3.34	3.34	3.33	3.34	3.18	3.34	2.21
1993/94	3.20	3.50	3.52	3.32	3.49	3.66	3.74	3.79						
Pacific Northwest (white) 5/														
1980/81	3.53	3.71	3.67	3.80	4.03	4.12	4.08	4.05	4.05	4.11	4.02	4.08	3.94	3.08
1981/82	3.97	3.69	3.78	3.80	3.94	3.96	3.98	3.91	3.75	3.68	3.72	3.71	3.82	3.29
1982/83	3.71	3.62	3.74	3.76	3.86	3.91	3.98	4.07	4.15	4.18	4.13	4.04	3.93	3.65
1983/84	3.78	3.61	3.68	3.70	3.62	3.59	3.51	3.49	3.31	3.48	3.57	3.64	3.58	3.75
1984/85	3.71	3.26	3.32	3.31	3.38	3.38	3.35	3.43	3.45	3.53	3.57	3.54	3.44	3.43
1985/86	3.35	2.97	3.05	3.16	3.29	3.39	3.44	3.40	3.41	3.52	3.60	3.49	3.34	3.43
1986/87	2.97	2.44	2.36	2.35	2.40	2.48	2.56	2.61	2.69	2.69	2.74	2.73	2.59	2.50
1987/88	2.60	2.54	2.48	2.57	2.70	2.62	2.73	2.88	2.89	2.79	2.95	3.09	2.74	2.39
1988/89	3.44	3.72	3.80	3.97	4.13	4.19	4.31	4.48	4.48	4.36	4.40	4.31	4.13	2.32
1989/90	4.13	4.12	4.14	4.04	4.06	3.98	4.15	4.06	3.66	3.47	3.39	3.37	3.88	2.17
1990/91	3.26	3.04	2.82	2.69	2.48	2.47	2.51	2.56	2.61	2.78	2.86	2.94	2.75	2.06
1991/92	2.98	2.98	3.06	3.23	3.56	3.89	4.01	3.95	4.19	4.10	4.00	4.02	3.66	2.14
1992/93	3.94	3.76	3.61	3.82	3.83	3.80	3.81	3.86	3.70	3.52	3.41	3.25	3.69	2.37
1993/94	3.12	3.13	3.08	2.98	2.99	3.06	3.16	3.21						
U.S. average 6/														
1980/81	3.69	3.81	3.94	3.99	4.19	4.32	4.22	4.21	4.17	4.09	4.07	3.95	3.99	3.00
1981/82	3.70	3.62	3.62	3.65	3.77	3.85	3.80	3.78	3.70	3.67	3.68	3.64	3.69	3.20
1982/83	3.39	3.26	3.34	3.38	3.43	3.48	3.51	3.57	3.57	3.66	3.75	3.73	3.45	3.55
1983/84	3.50	3.34	3.61	3.65	3.60	3.54	3.48	3.50	3.40	3.49	3.63	3.66	3.51	3.65
1984/85	3.46	3.29	3.43	3.43	3.43	3.45	3.38	3.38	3.38	3.38	3.43	3.30	3.39	3.30
1985/86	3.09	2.93	2.89	3.01	3.10	3.22	3.25	3.19	3.16	3.28	3.37	3.01	3.08	3.30
1986/87	2.47	2.25	2.26	2.28	2.30	2.43	2.49	2.53	2.58	2.57	2.63	2.66	2.42	2.40
1987/88	2.45	2.31	2.35	2.54	2.62	2.69	2.70	2.75	2.79	2.74	2.79	2.97	2.57	2.28
1988/89	3.37	3.50	3.61	3.74	3.84	3.88	3.94	4.02	4.03	4.07	4.03	4.01	3.72	2.21
1989/90	3.85	3.78	3.74	3.72	3.75	3.72	3.79	3.71	3.56	3.48	3.49	3.40	3.72	2.06
1990/91	3.08	2.79	2.58	2.46	2.43	2.39	2.40	2.42	2.42	2.53	2.60	2.65	2.61	1.95
1991/92	2.55	2.50	2.63	2.80	3.07	3.25	3.44	3.54	3.78	3.72	3.65	3.64	3.00	2.04
1992/93	3.43	3.15	3.01	3.20	3.22	3.29	3.31	3.37	3.33	3.30	3.26	3.11	3.24	2.21
1993/94	2.84	2.85	2.96	3.11	3.22	3.47	3.60	3.61						

1/ January 1994 data are preliminary. 2/ Kansas, Nebraska, Texas, Oklahoma, and Arkansas. 3/ Ohio, Indiana, Illinois and Missouri. 4/ Wheat prices by class represent averages for the entire United States. 5/ Washington, Oregon, and Idaho. 6/ Season-average prices do not include an allowance for unredeemed loans and purchases beginning 1979/80. 7/ Projected.

Source: National Agricultural Statistics Service & Economic Research Service, USDA.

Appendix table 18--Wheat cash prices for leading classes at major markets, 1953/54-1993/94

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
\$/bushel													
KANSAS CITY, NO. 1 HARD RED WINTER (ORDINARY PROTEIN)													
1953/54	2.09	2.09	2.16	2.18	2.26	2.31	2.33	2.30	2.37	2.40	2.42	2.36	2.27
1954/55	2.14	2.21	2.28	2.31	2.34	2.38	2.41	2.40	2.41	2.42	2.42	2.49	2.35
1955/56	2.26	2.13	2.08	2.13	2.14	2.13	2.16	2.17	2.19	2.27	2.35	2.24	2.19
1956/57	2.12	2.07	2.07	2.17	2.26	2.34	2.33	2.34	2.33	2.33	2.31	2.21	2.26
1957/58	2.22	2.14	2.11	2.11	2.12	2.18	2.16	2.16	2.18	2.26	2.26	2.28	2.18
1958/59	1.95	1.81	1.83	1.92	1.94	1.95	1.95	1.95	1.99	2.04	2.05	2.01	1.95
1959/60	1.92	1.90	1.95	1.97	2.02	2.03	2.04	2.05	2.08	2.12	2.09	2.00	2.01
1960/61	1.94	1.89	1.94	1.98	1.98	2.01	2.02	2.05	2.05	2.01	1.99	1.94	1.98
1961/62	1.94	1.97	2.03	2.05	2.05	2.08	2.07	2.06	2.06	2.10	2.12	2.16	2.06
1962/63	2.19	2.20	2.17	2.17	2.19	2.22	2.24	2.25	2.29	2.32	2.37	2.24	2.24
1963/64	2.05	1.98	2.03	2.09	2.19	2.19	2.21	2.24	2.22	2.16	2.26	2.20	2.15
1964/65	1.69	1.57	1.60	1.64	1.66	1.67	1.64	1.62	1.61	1.56	1.53	1.49	1.61
1965/66	1.46	1.49	1.57	1.59	1.59	1.61	1.62	1.64	1.63	1.62	1.63	1.71	1.60
1966/67	1.88	1.95	1.95	1.92	1.79	1.85	1.86	1.77	1.82	1.82	1.76	1.76	1.84
1967/68	1.68	1.61	1.56	1.57	1.59	1.56	1.58	1.60	1.61	1.60	1.54	1.53	1.59
1968/69	1.44	1.37	1.35	1.34	1.40	1.42	1.40	1.41	1.40	1.40	1.39	1.39	1.39
1969/70	1.35	1.28	1.31	1.39	1.43	1.46	1.46	1.46	1.46	1.45	1.47	1.44	1.41
1970/71	1.40	1.38	1.47	1.59	1.58	1.59	1.59	1.58	1.58	1.55	1.56	1.61	1.54
1971/72	1.63	1.54	1.54	1.53	1.56	1.56	1.58	1.58	1.57	1.58	1.61	1.62	1.58
1972/73	1.52	1.58	1.82	2.10	2.15	2.25	2.62	2.67	2.48	2.42	2.51	2.63	2.23
1973/74	2.69	2.90	4.67	5.01	4.67	4.78	5.22	5.68	5.82	5.01	4.07	3.59	4.51
1974/75	4.05	4.36	4.33	4.35	4.94	4.88	4.66	4.15	3.93	3.69	3.66	3.34	4.20
1975/76	3.23	3.61	4.12	4.21	4.09	3.71	3.50	3.57	3.81	3.81	3.61	3.57	3.84
1976/77	3.75	3.63	3.21	3.01	2.77	2.62	2.64	2.70	2.73	2.63	2.52	2.36	2.88
1977/78	2.31	2.35	2.31	2.47	2.56	2.81	2.80	2.82	2.84	3.07	3.21	3.21	2.72
1978/79	3.12	3.14	3.14	3.24	3.42	3.48	3.39	3.42	3.50	3.52	3.53	3.64	3.38
1979/80	4.17	4.34	4.12	4.26	4.39	4.53	4.51	4.33	4.32	4.07	3.90	4.10	4.25
1980/81	4.07	4.21	4.31	4.45	4.70	4.89	4.54	4.60	4.47	4.35	4.48	4.36	4.45
1981/82	4.24	4.25	4.14	4.19	4.31	4.46	4.35	4.33	4.26	4.25	4.28	4.22	4.27
1982/83	4.06	3.74	3.70	3.75	3.61	3.86	3.98	4.00	4.08	4.18	4.21	4.05	3.94
1983/84	3.92	3.71	3.88	3.90	3.84	3.82	3.85	3.81	3.71	3.85	3.93	3.89	3.84
1984/85	3.80	3.67	3.80	3.89	3.86	3.85	3.76	3.76	3.74	3.67	3.62	3.42	3.74
1985/86	3.38	3.17	3.03	3.07	3.15	3.35	3.42	3.32	3.30	3.36	3.45	3.40	3.28
1986/87	2.80	2.50	2.48	2.53	2.60	2.68	2.68	2.70	2.80	2.90	2.90	3.02	2.72
1987/88	2.70	2.59	2.65	2.78	2.90	2.90	3.10	3.20	3.28	3.10	3.14	3.20	2.96
1988/89	3.79	3.77	3.78	4.03	4.13	4.18	4.25	4.40	4.37	4.32	4.46	4.55	4.17
1989/90	4.44	4.28	4.24	4.18	4.28	4.36	4.39	4.30	4.13	4.04	4.13	3.91	4.22
1990/91	3.60	3.11	2.89	2.82	2.81	2.78	2.78	2.71	2.77	2.94	2.98	3.04	2.94
1991/92	2.99	2.91	3.10	3.31	3.64	3.76	4.06	4.66	4.51	4.33	4.02	3.90	3.77
1992/93	3.91	3.52	3.27	3.56	3.60	3.78	3.81	3.97	3.75	3.74	3.59	3.51	3.67
1993/94	3.33	3.38	3.34	3.37	3.52	3.39	4.15	4.00					
KANSAS CITY, NO. 1 HARD RED WINTER (13 % PROTEIN)													
1953/54	2.14	2.20	2.26	2.32	2.40	2.43	2.44	2.44	2.46	2.49	2.51	2.49	2.38
1954/55	2.40	2.44	2.47	2.54	2.58	2.59	2.61	2.57	2.54	2.56	2.57	2.63	2.54
1955/56	2.49	2.37	2.28	2.31	2.32	2.31	2.32	2.30	2.29	2.35	2.40	2.32	2.34
1956/57	2.23	2.16	2.22	2.29	2.31	2.36	2.35	2.36	2.34	2.35	2.34	2.24	2.30
1957/58	2.26	2.26	2.25	2.23	2.24	2.29	2.29	2.30	2.30	2.35	2.34	2.35	2.29
1958/59	2.10	2.04	2.00	2.09	2.12	2.13	2.12	2.12	2.13	2.15	2.16	2.14	2.11
1959/60	2.07	2.05	2.09	2.12	2.14	2.13	2.14	2.13	2.14	2.17	2.15	2.09	2.12
1960/61	2.04	2.02	2.05	2.10	2.11	2.12	2.13	2.13	2.13	2.10	2.10	2.05	2.09
1961/62	2.08	2.18	2.23	2.23	2.22	2.24	2.25	2.23	2.24	2.26	2.28	2.32	2.23
1962/63	2.35	2.37	2.40	2.38	2.39	2.42	2.42	2.43	2.47	2.49	2.48	2.36	2.41
1963/64	2.17	2.09	2.12	2.21	2.29	2.27	2.28	2.29	2.27	2.22	2.30	2.24	2.23
1964/65	1.74	1.64	1.67	1.70	1.69	1.71	1.70	1.66	1.66	1.61	1.57	1.55	1.66
1965/66	1.56	1.67	1.74	1.76	1.78	1.77	1.76	1.72	1.71	1.72	1.74	1.82	1.73
1966/67	1.99	2.06	2.03	1.97	1.84	1.89	1.89	1.80	1.76	1.84	1.78	1.81	1.89
1967/68	1.73	1.65	1.60	1.61	1.63	1.59	1.60	1.62	1.62	1.62	1.57	1.56	1.62
1968/69	1.53	1.48	1.49	1.53	1.59	1.62	1.61	1.61	1.58	1.60	1.59	1.57	1.57
1969/70	1.57	1.60	1.61	1.66	1.70	1.71	1.72	1.71	1.64	1.61	1.65	1.60	1.65
1970/71	1.59	1.55	1.65	1.74	1.70	1.72	1.75	1.74	1.72	1.70	1.68	1.69	1.69
1971/72	1.73	1.59	1.59	1.58	1.62	1.63	1.65	1.64	1.64	1.67	1.69	1.69	1.64
1972/73	1.61	1.68	1.90	2.15	2.21	2.30	2.65	2.68	2.49	2.45	2.55	2.69	2.28
1973/74	2.80	3.06	4.74	5.04	4.70	4.78	5.23	5.68	5.86	5.13	4.24	3.76	4.59
1974/75	4.47	4.78	4.74	4.85	5.47	5.36	5.15	4.64	4.31	4.08	4.07	3.71	4.64
1975/76	3.81	4.10	4.45	4.55	4.46	4.13	3.97	4.00	4.26	4.23	4.04	3.88	4.16
1976/77	4.10	3.96	3.45	3.35	3.09	3.02	2.99	2.99	3.01	2.89	2.75	2.62	3.19
1977/78	2.51	2.43	2.38	2.53	2.61	2.86	2.87	2.92	2.92	3.09	3.36	3.25	2.81
1978/79	3.20	3.17	3.15	3.26	3.42	3.48	3.40	3.43	3.52	3.55	3.58	3.71	3.41
1979/80	4.22	4.42	4.28	4.39	4.55	4.67	4.60	4.40	4.35	4.14	3.96	4.14	4.34
1980/81	4.12	4.25	4.34	4.49	4.70	4.91	4.60	4.67	4.50	4.40	4.57	4.44	4.50
1981/82	4.36	4.26	4.16	4.22	4.29	4.44	4.33	4.35	4.32	4.29	4.32	4.24	4.30
1982/83	4.15	4.12	4.00	3.94	3.80	4.09	4.24	4.19	4.17	4.27	4.35	4.22	4.13
1983/84	4.22	4.15	4.16	4.21	4.20	4.17	4.11	4.06	3.95	4.12	4.22	4.17	4.15
1984/85	4.15	3.99	3.98	4.03	4.01	3.99	3.91	3.87	3.87	3.80	3.84	3.72	3.93
1985/86	3.72	3.53	3.36	3.41	3.50	3.70	3.81	3.69	3.65	3.67	3.70	3.65	3.62
1986/87	2.90	2.70	2.55	2.66	2.75	2.84	2.89	2.95	2.98	3.00	3.05	3.17	2.87
1987/88	2.95	2.86	2.90	3.01	3.10	3.15	3.20	3.30	3.38	3.21	3.26	3.31	3.14
1988/89	3.92	3.85	3.85	4.08	4.16	4.23	4.26	4.41	4.40	4.55	4.50	4.60	4.23
1989/90	4.48	4.29	4.24	4.18	4.23	4.31	4.34	4.28	4.12	4.02	4.07	3.91	4.21
1990/91	3.71	3.17	2.94	2.89	2.86	2.84	2.87	2.83	2.88	3.03	3.04	3.05	3.01
1991/92	3.00	2.92	3.11	3.34	3.67	3.79	4.07	4.36	4.53	4.34	4.10	3.95	3.77
1992/93	4.03	3.68	3.41	3.64	3.72	3.49	3.94	4.05	3.82	3.83	3.68	3.58	3.74
1993/94	3.60	3.89	3.88	4.23	4.58	4.98	5.11	4.69					

Continued--

Appendix table 18--Wheat cash prices for leading classes at major markets, 1953/54-1993/94--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
\$/bushel													
CHICAGO, NO. 2 SOFT RED WINTER													
1953/54	1.98	1.92	1.87	1.92	1.94	1.99	2.04	2.12	2.18	2.28	2.13	2.00	2.03
1954/55	1.95	2.04	2.11	2.16	2.15	2.24	2.31	2.34	2.28	2.21	2.15	2.18	2.18
1955/56	2.08	2.00	1.94	1.99	2.05	2.07	2.12	2.14	2.21	2.29	2.37	2.24	2.13
1956/57	2.14	2.10	2.16	2.24	2.26	2.39	2.43	2.44	2.36	2.28	2.23	2.14	2.26
1957/58	2.06	2.15	2.17	2.15	2.15	2.19	2.21	2.22	2.21	2.26	2.23	2.22	2.19
1958/59	1.93	1.87	1.83	1.87	1.92	1.95	1.96	1.98	2.02	2.09	2.06	1.89	1.95
1959/60	1.87	1.90	1.92	1.94	1.96	2.01	2.00	2.03	2.01	2.06	2.11	2.07	1.99
1960/61	1.91	1.85	1.88	1.93	1.97	2.02	2.08	2.15	2.14	2.07	1.93	1.88	1.98
1961/62	1.89	1.94	1.90	1.98	2.01	2.05	2.09	2.06	2.04	2.08	2.13	2.17	2.03
1962/63	2.17	2.15	2.11	2.07	2.05	2.10	2.13	2.13	2.11	2.11	2.16	2.13	2.12
1963/64	1.96	1.84	1.83	1.97	2.15	2.17	2.20	2.24	2.21	2.03	2.12	2.03	2.06
1964/65	1.53	1.43	1.46	1.49	1.52	1.55	1.52	1.53	1.53	1.51	1.49	1.46	1.50
1965/66	1.44	1.48	1.55	1.58	1.59	1.66	1.69	1.71	1.71	1.63	1.64	1.66	1.61
1966/67	1.79	1.90	1.90	1.86	1.72	1.76	1.80	1.71	1.70	1.80	1.73	1.67	1.78
1967/68	1.58	1.50	1.49	1.51	1.52	1.45	1.46	1.49	1.51	1.50	1.41	1.38	1.48
1968/69	1.30	1.28	1.22	1.20	1.25	1.32	1.33	1.38	1.36	1.32	1.32	1.33	1.30
1969/70	1.28	1.30	1.27	1.31	1.36	1.41	1.48	1.49	1.55	1.53	1.55	1.48	1.42
1970/71	1.41	1.45	1.52	1.67	1.74	1.77	1.74	1.75	1.74	1.70	1.67	1.61	1.65
1971/72	1.64	1.54	1.45	1.45	1.53	1.60	1.71	1.69	1.61	1.62	1.66	1.63	1.59
1972/73	1.46	1.53	1.76	2.02	2.11	2.28	2.60	2.65	2.47	2.37	2.45	2.71	2.20
1973/74	2.82	3.08	4.75	5.11	4.75	5.47	5.84	6.30	6.50	5.59	4.33	3.48	4.84
1974/75	3.91	4.40	4.34	4.41	5.03	4.86	4.60	4.02	3.84	3.62	3.63	3.25	4.16
1975/76	3.03	3.42	3.82	4.06	3.84	3.49	3.32	3.45	3.78	3.66	3.34	3.30	3.54
1976/77	3.47	3.37	3.01	2.89	2.72	2.60	2.66	2.73	2.74	2.63	2.53	2.35	2.81
1977/78	2.29	2.20	2.08	2.20	2.27	2.59	2.65	2.69	2.64	2.82	3.11	3.14	2.56
1978/79	3.18	3.22	3.32	3.42	3.51	3.68	3.68	3.73	3.88	3.79	3.60	3.86	3.57
1979/80	4.36	4.39	4.23	4.28	4.30	4.13	4.26	4.36	4.39	4.18	3.96	4.04	4.24
1980/81	3.96	4.17	4.21	4.38	4.70	4.92	4.54	4.57	4.34	4.15	4.18	3.80	4.33
1981/82	3.60	3.70	3.70	3.87	3.97	4.08	3.86	3.77	3.57	3.59	3.70	3.43	3.74
1982/83	3.31	3.36	3.35	3.18	2.98	3.33	3.23	3.32	3.40	3.36	3.51	3.55	3.32
1983/84	3.53	3.59	3.71	3.62	3.56	3.42	3.55	3.47	3.34	3.57	3.65	3.65	3.55
1984/85	3.51	3.44	3.49	3.47	3.51	3.62	3.49	3.51	3.55	3.58	3.63	3.34	3.51
1985/86	3.27	3.09	2.87	2.83	3.04	3.33	3.46	3.34	3.37	3.40	3.39	3.25	3.22
1986/87	2.52	2.58	2.44	2.36	2.57	2.73	2.76	2.87	2.91	3.11	3.16	3.08	2.76
1987/88	2.63	2.54	2.61	2.77	2.82	2.80	3.00	3.23	3.23	2.94	3.02	3.13	2.89
1988/89	3.56	3.52	3.61	3.84	4.07	4.09	4.25	4.39	4.30	4.31	4.04	4.07	4.00
1989/90	3.87	3.92	3.94	3.93	4.07	4.07	4.13	4.03	3.92	3.61	3.83	3.71	3.92
1990/91	3.26	3.04	2.83	2.62	2.62	2.53	2.52	2.50	2.53	2.76	2.80	2.83	2.74
1991/92	2.86	2.79	2.97	3.24	3.50	3.57	3.79	4.12	4.15	3.71	3.53	3.68	3.49
1992/93	3.60	3.39	3.09	3.24	3.39	3.60	3.59	3.77	3.67	3.58	3.72	3.19	3.49
1993/94	2.82	3.03	3.12	2.99	3.02	3.29	3.53	3.67					
ST. LOUIS, NO. 2 SOFT RED WINTER													
1953/54	1.94	1.91	1.89	1.93	1.97	2.04	2.11	2.21	2.27	2.34	2.21	2.12	2.08
1954/55	1.94	2.05	2.14	2.19	2.20	2.29	2.33	2.38	2.31	2.25	2.24	2.26	2.22
1955/56	2.06	2.01	1.95	1.96	2.00	2.05	2.14	2.17	2.23	2.29	2.36	2.23	2.12
1956/57	2.14	2.06	2.17	2.26	2.29	2.39	2.42	2.44	2.33	2.31	2.25	2.18	2.27
1957/58	2.09	2.14	2.16	2.15	2.14	2.20	2.25	2.28	2.24	2.27	2.27	2.27	2.21
1958/59	2.02	1.85	1.84	1.89	1.96	1.98	2.00	2.04	2.06	2.09	2.01	1.85	1.97
1959/60	1.85	1.89	1.94	1.95	1.98	2.03	2.05	2.08	2.04	2.09	2.15	2.04	2.01
1960/61	1.91	1.86	1.89	1.92	1.98	2.03	2.10	2.17	2.16	2.10	1.91	1.83	1.99
1961/62	1.84	1.94	1.99	2.02	2.05	2.05	2.09	2.07	2.06	2.10	2.14	2.18	2.04
1962/63	2.18	2.16	2.12	2.09	2.09	2.12	2.15	2.18	2.19	2.19	2.25	2.20	2.16
1963/64	1.92	1.84	1.84	2.00	2.18	2.21	2.24	2.32	2.28	2.08	2.16	2.02	2.09
1964/65	1.43	1.45	1.46	1.49	1.51	1.56	1.55	1.57	1.58	1.56	1.54	1.45	1.51
1965/66	1.44	1.47	1.52	1.55	1.57	1.66	1.70	1.73	1.74	1.66	1.66	1.66	1.61
1966/67	1.81	1.88	1.88	1.85	1.71	1.77	1.88	1.74	1.73	1.82	1.75	1.67	1.79
1967/68	1.57	1.48	1.45	1.47	1.50	1.45	1.50	1.52	1.55	1.52	1.46	1.44	1.49
1968/69	1.26	1.28	1.21	1.17	1.27	1.36	1.38	1.42	1.39	1.34	1.35	1.37	1.32
1969/70	1.31	1.29	1.28	1.32	1.34	1.43	1.50	1.50	1.54	1.52	1.56	1.49	1.42
1970/71	1.41	1.42	1.45	1.64	1.69	1.71	1.68	1.71	1.71	1.63	1.57	1.49	1.59
1971/72	1.52	1.44	1.34	1.33	1.41	1.49	1.57	1.57	1.52	1.57	1.65	1.64	1.50
1972/73	1.37	1.46	1.63	1.92	2.09	2.23	2.59	2.64	2.47	2.32	2.34	2.50	2.13
1973/74	2.64	2.91	4.37	4.94	4.53	4.69	5.46	6.22	5.96	5.08	4.02	3.31	4.51
1974/75	3.84	4.35	4.24	4.36	4.86	4.70	4.57	4.04	3.86	3.68	3.58	3.20	4.11
1975/76	2.94	3.29	3.71	3.76	3.63	3.50	3.36	3.49	3.68	3.57	3.30	3.28	3.46
1976/77	3.39	3.32	2.98	2.86	2.60	2.60	2.65	2.68	2.67	2.62	2.53	2.32	2.77
1977/78	2.15	2.14	1.97	2.01	2.28	2.70	2.74	2.75	2.71	2.90	3.09	2.99	2.54
1978/79	3.05	3.16	3.21	3.23	3.41	3.57	3.50	3.57	3.66	3.51	3.62	3.68	3.43
1979/80	4.08	4.18	4.04	4.08	4.02	4.10	4.28	4.26	4.32	4.11	3.80	3.93	4.10
1980/81	3.73	4.10	4.19	4.42	4.78	4.96	4.78	4.80	4.57	4.32	4.36	3.67	4.39
1981/82	3.41	3.54	3.56	3.67	3.74	4.05	3.90	3.76	3.60	3.61	3.72	3.31	3.66
1982/83	3.25	3.27	3.14	3.06	3.06	3.38	3.28	3.33	3.41	3.43	3.58	3.61	3.32
1983/84	3.46	3.51	3.79	3.70	3.62	3.56	3.67	3.62	3.46	3.71	3.82	3.51	3.62
1984/85	3.45	3.44	3.50	3.52	3.60	3.72	3.67	3.69	3.65	3.67	3.65	3.24	3.57
1985/86	3.29	3.07	2.84	2.85	3.10	3.42	3.58	3.48	3.49	3.64	3.66	2.74	3.26
1986/87	2.61	2.60	2.54	2.55	2.88	3.05	3.06	3.08	3.05	3.09	2.88	3.03	2.87
1987/88	2.63	2.58	2.59	2.77	2.95	2.97	3.22	3.24	3.18	2.98	3.10	3.20	2.95
1988/89	3.50	3.56	3.73	3.94	4.13	4.22	4.33	4.46	4.30	4.39	4.22	4.20	4.08
1989/90	3.89	3.95	3.79	4.03	4.05	4.20	4.19	4.13	4.00	3.87	3.88	3.33	3.94
1990/91	3.27	3.02	2.85	2.66	2.57	2.65	2.71	2.61	2.64	2.85	2.91	2.98	2.81
1991/92	2.89	2.65	2.76	2.86	3.00	3.34	3.63	3.83	3.94	3.81	3.53	3.57	3.32
1992/93	3.55	3.39	3.09	3.19	3.34	3.71	3.74	3.99	3.85	3.98	3.73	2.93	3.54
1993/94	2.83	2.94	2.98	2.75	2.93	3.33	3.62	3.83					

Continued--

Appendix table 18--Wheat cash prices for leading classes at major markets, 1953/54-1993/94--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
\$/bushel													
TOLEDO, NO. 2 SOFT RED WINTER													
1953/54	1.90	1.77	1.76	1.82	1.87	1.93	2.00	2.10	2.14	2.21	2.09	2.01	1.97
1954/55	1.87	1.96	2.02	2.04	2.07	2.18	2.18	2.23	2.18	2.10	2.07	2.09	2.08
1955/56	2.02	1.90	1.80	1.86	1.93	1.97	2.05	2.05	2.11	2.18	2.28	2.16	2.03
1956/57	2.19	2.03	2.07	2.10	2.17	2.34	2.38	2.36	2.24	2.18	2.16	2.05	2.19
1957/58	2.01	2.04	2.09	2.12	2.11	2.16	2.19	2.16	2.14	2.13	2.14	2.15	2.12
1958/59	2.10	1.77	1.73	1.76	1.83	1.87	1.88	1.89	1.93	1.97	1.93	1.86	1.88
1959/60	1.80	1.82	1.81	1.85	1.91	1.98	1.98	2.00	1.96	2.01	2.05	2.00	1.93
1960/61	1.88	1.74	1.77	1.82	1.90	1.95	1.99	2.04	2.02	1.99	1.85	1.80	1.90
1961/62	1.82	1.87	1.90	1.92	1.94	2.01	2.04	2.01	1.99	2.03	2.07	2.14	1.98
1962/63	2.11	2.10	2.06	2.04	2.05	2.08	2.10	2.07	2.04	2.03	2.06	2.04	2.07
1963/64	2.02	1.76	1.74	1.88	2.09	2.11	2.17	2.20	2.18	2.03	2.12	1.99	2.02
1964/65	1.46	1.41	1.40	1.43	1.44	1.45	1.47	1.47	1.49	1.50	1.47	1.45	1.45
1965/66	1.42	1.44	1.50	1.56	1.58	1.65	1.69	1.71	1.69	1.64	1.57	1.59	1.59
1966/67	1.76	1.84	1.84	1.79	1.68	1.71	1.75	1.65	1.65	1.73	1.65	1.62	1.72
1967/68	1.53	1.45	1.41	1.40	1.41	1.39	1.44	1.43	1.43	1.42	1.37	1.36	1.42
1968/69	1.27	1.23	1.13	1.11	1.18	1.29	1.31	1.33	1.31	1.29	1.29	1.30	1.25
1969/70	1.28	1.25	1.22	1.26	1.30	1.38	1.45	1.46	1.52	1.52	1.58	1.50	1.39
1970/71	1.43	1.43	1.51	1.64	1.69	1.73	1.72	1.73	1.74	1.65	1.60	1.58	1.62
1971/72	1.60	1.46	1.35	1.35	1.45	1.52	1.57	1.59	1.52	1.55	1.60	1.68	1.52
1972/73	1.51	1.43	1.62	1.92	2.07	2.30	2.64	2.66	2.46	2.38	2.45	2.61	2.17
1973/74	2.68	3.10	4.71	5.07	4.70	5.22	5.50	6.18	6.52	5.50	4.17	3.27	4.72
1974/75	3.77	4.29	4.28	4.33	4.93	4.81	4.59	4.00	3.83	3.60	3.52	3.07	4.09
1975/76	2.96	3.27	3.71	3.86	3.69	3.34	3.28	3.37	3.64	3.56	3.27	3.22	3.43
1976/77	3.40	3.27	2.96	2.90	2.70	2.59	2.64	2.69	2.68	2.55	2.46	2.30	2.76
1977/78	2.21	2.13	2.03	2.08	2.21	2.53	2.57	2.62	2.55	2.77	3.07	3.03	2.48
1978/79	3.09	3.13	3.21	3.32	3.46	3.73	3.72	3.73	3.69	3.66	3.56	3.71	3.50
1979/80	4.17	4.37	4.22	4.28	4.29	4.21	4.28	4.21	4.32	4.08	3.80	3.90	4.18
1980/81	3.84	4.14	4.16	4.38	4.82	5.02	4.65	4.70	4.47	4.16	4.16	3.76	4.35
1981/82	3.55	3.63	3.71	3.83	3.98	4.08	3.85	3.71	3.47	3.46	3.63	3.45	3.70
1982/83	3.35	3.36	3.28	3.09	2.84	3.19	3.23	3.28	3.32	3.29	3.45	3.47	3.26
1983/84	3.42	3.48	3.69	3.54	3.43	3.37	3.46	3.43	3.26	3.50	3.61	3.60	3.48
1984/85	3.50	3.44	3.44	3.44	3.43	3.53	3.43	3.52	3.56	3.54	3.58	3.30	3.48
1985/86	3.22	3.02	2.77	2.74	2.90	3.18	3.39	3.32	3.34	3.47	3.30	3.22	3.16
1986/87	2.58	2.55	2.45	2.33	2.61	2.75	2.81	2.92	2.93	3.06	2.99	3.07	2.75
1987/88	2.60	2.55	2.54	2.69	2.86	2.82	3.10	3.21	3.20	2.92	2.99	3.07	2.88
1988/89	3.63	3.63	3.73	3.93	4.02	4.06	4.26	4.37	4.24	4.26	4.02	4.09	4.02
1989/90	3.86	3.86	3.86	3.84	3.95	3.99	4.09	3.96	3.86	3.83	3.90	3.52	3.88
1990/91	3.28	3.05	2.78	2.57	2.49	2.41	2.49	2.37	2.52	2.72	2.75	2.77	2.68
1991/92	2.82	2.78	3.01	3.25	3.51	3.58	3.93	4.28	4.26	3.75	3.56	3.55	3.52
1992/93	3.54	3.30	3.03	3.16	3.24	3.42	3.44	3.63	3.56	3.45	3.38	3.02	3.35
1993/94	2.77	2.95	3.05	3.02	3.16	3.36	3.57	3.70					
TOLEDO, NO. 2 SOFT WHITE													
1953/54	1.81	1.79	1.79	1.86	1.89	1.95	2.04	2.10	2.11	2.18	2.07	1.99	1.97
1954/55	1.86	1.97	2.03	2.05	2.12	2.24	2.23	2.25	2.22	2.20	2.14	2.14	2.12
1955/56	2.08	1.96	1.85	1.89	2.00	2.05	2.11	2.09	2.12	2.17	2.25	2.17	2.06
1956/57	2.22	2.03	2.07	2.12	2.19	2.36	2.37	2.35	2.22	2.17	2.16	2.04	2.19
1957/58	2.01	2.05	2.12	2.14	2.17	2.25	2.22	2.17	2.14	2.16	2.19	2.22	2.15
1958/59	2.17	1.78	1.73	1.79	1.87	1.90	1.90	1.88	1.91	2.93	1.89	1.84	1.97
1959/60	1.80	1.82	1.79	1.84	1.87	1.95	1.96	1.98	1.95	2.04	2.07	2.07	1.93
1960/61	1.91	1.77	1.85	1.90	1.98	1.96	1.99	2.03	2.01	1.98	1.82	1.79	1.92
1961/62	1.82	1.87	1.90	1.91	1.93	2.01	2.04	2.02	1.99	2.02	2.07	2.13	1.98
1962/63	2.11	2.10	2.06	2.03	2.03	2.08	2.12	2.08	2.09	2.06	2.11	2.07	2.08
1963/64	2.02	1.78	1.77	1.91	2.08	2.10	2.16	2.20	2.18	2.03	2.13	1.99	2.03
1964/65	1.46	1.41	1.41	1.43	1.44	1.45	1.46	1.45	1.45	1.47	1.44	1.43	1.44
1965/66	1.41	1.44	1.53	1.57	1.59	1.65	1.69	1.74	1.73	1.59	1.61	1.63	1.60
1966/67	1.78	1.85	1.87	1.82	1.68	1.71	1.75	1.65	1.64	1.72	1.64	1.60	1.73
1967/68	1.53	1.45	1.41	1.40	1.41	1.39	1.44	1.42	1.43	1.42	1.37	1.36	1.42
1968/69	1.27	1.23	1.13	1.12	1.19	1.29	1.31	1.33	1.31	1.29	1.28	1.29	1.25
1969/70	1.27	1.25	1.24	1.28	1.31	1.40	1.47	1.48	1.53	1.51	1.56	1.48	1.40
1970/71	1.41	1.45	1.51	1.64	1.69	1.73	1.72	1.70	1.69	1.59	1.55	1.51	1.60
1971/72	1.57	1.49	1.44	1.46	1.53	1.58	1.61	1.61	1.54	1.57	1.63	1.68	1.56
1972/73	1.51	1.49	1.72	1.97	2.07	2.30	2.64	2.65	2.46	2.38	2.44	2.58	2.18
1973/74	2.66	3.10	4.76	5.14	4.71	5.22	5.50	6.18	6.53	5.60	3.91	3.27	4.72
1974/75	3.75	4.24	4.22	4.22	4.78	4.63	4.44	3.85	3.67	3.44	3.37	2.95	3.96
1975/76	2.85	3.21	3.62	3.78	3.60	3.28	3.23	3.32	3.59	3.52	3.22	3.14	3.36
1976/77	3.35	3.24	2.94	2.89	2.71	2.57	2.64	2.70	2.69	2.54	2.45	2.29	2.75
1977/78	2.21	2.16	2.04	2.06	2.18	2.52	2.56	2.62	2.56	2.77	3.07	3.03	2.48
1978/79	3.10	3.26	3.45	3.63	3.69	3.87	3.78	3.72	3.63	3.44	3.35	3.53	3.54
1979/80	4.08	4.13	4.15	4.17	4.12	4.20	4.18	4.10	4.14	3.90	3.63	3.74	4.05
1980/81	3.71	4.05	4.15	4.31	NA	NA	4.44	4.40	4.21	3.98	3.99	3.62	4.09
1981/82	3.43	3.62	3.77	3.91	3.99	4.10	3.82	3.68	3.49	3.47	3.61	3.45	3.70
1982/83	3.35	3.49	3.42	3.22	2.92	3.22	3.29	3.25	3.39	3.43	3.49	3.48	3.33
1983/84	3.42	3.51	3.71	3.56	3.42	3.36	3.46	3.43	3.25	3.50	3.62	3.49	3.48
1984/85	3.35	3.37	3.42	3.42	3.41	3.51	3.41	3.50	3.53	3.48	3.48	3.18	3.42
1985/86	3.13	3.02	2.89	2.89	3.12	3.30	3.42	3.26	3.26	3.31	2.89	2.93	3.12
1986/87	2.50	2.52	2.48	2.29	2.54	2.69	2.73	2.80	2.84	2.87	2.79	2.89	2.66
1987/88	2.63	2.57	2.69	2.81	2.88	2.95	3.14	3.28	3.27	2.96	3.02	3.09	2.94
1988/89	3.62	3.61	3.69	3.87	3.94	3.95	4.11	4.22	4.02	4.06	3.80	3.91	3.90
1989/90	3.81	3.82	3.83	3.79	3.91	3.93	4.01	3.86	3.74	3.70	3.72	3.44	3.80
1990/91	3.21	2.96	2.69	2.48	2.39	2.28	2.38	2.37	2.40	2.61	2.67	2.68	2.59
1991/92	2.69	2.62	2.86	3.09	3.32	3.41	3.73	4.07	4.15	4.09	3.44	3.43	3.41
1992/93	3.37	3.11	2.86	3.02	3.12	3.30	3.26	3.43					

Appendix table 18--Wheat cash prices for leading classes at major markets, 1953/54-1993/94--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
\$/bushel													
PORTLAND, NO. 1 SOFT WHITE													
1953/54	2.36	2.29	2.23	2.25	2.30	2.35	2.35	2.33	2.34	2.34	2.34	2.33	2.32
1954/55	2.33	2.28	2.32	2.34	2.31	2.34	2.34	2.36	2.37	2.39	2.41	2.40	2.35
1955/56	2.46	2.26	2.16	2.17	2.14	2.14	2.19	2.19	2.23	2.23	2.23	2.22	2.22
1956/57	2.14	2.09	2.12	2.20	2.26	2.34	2.46	2.51	2.59	2.61	2.63	2.58	2.38
1957/58	2.47	2.33	2.31	2.32	2.31	2.33	2.30	2.26	2.25	2.24	2.21	2.14	2.29
1958/59	2.08	1.96	1.96	1.97	2.03	2.04	2.03	2.02	2.04	2.03	2.03	2.05	2.02
1959/60	2.00	1.96	1.91	1.93	1.98	1.99	2.00	2.02	2.04	2.06	2.10	2.05	2.00
1960/61	1.99	1.94	1.96	1.99	2.01	2.06	2.10	2.12	2.15	2.10	2.04	2.01	2.04
1961/62	1.97	2.02	2.09	2.13	2.13	2.11	2.09	2.05	2.04	2.05	2.12	2.15	2.08
1962/63	2.18	2.19	2.15	2.13	2.13	2.15	2.17	2.19	2.24	2.23	2.26	2.23	2.19
1963/64	2.01	1.96	1.97	2.05	2.15	2.17	2.17	2.25	2.24	2.07	2.15	2.19	2.11
1964/65	1.60	1.53	1.52	1.49	1.48	1.51	1.51	1.49	1.50	1.50	1.52	1.54	1.52
1965/66	1.53	1.45	1.48	1.48	1.53	1.55	1.57	1.60	1.57	1.51	1.53	1.53	1.53
1966/67	1.61	1.84	1.84	1.84	1.75	1.73	1.73	1.74	1.67	1.72	1.75	1.79	1.75
1967/68	1.77	1.61	1.60	1.60	1.59	1.58	1.62	1.66	1.70	1.66	1.63	1.60	1.64
1968/69	1.60	1.48	1.45	1.45	1.46	1.49	1.49	1.48	1.48	1.46	1.46	1.48	1.48
1969/70	1.49	1.42	1.38	1.40	1.44	1.47	1.51	1.53	1.52	1.53	1.58	1.57	1.49
1970/71	1.57	1.53	1.53	1.59	1.63	1.72	1.77	1.78	1.77	1.77	1.77	1.83	1.69
1971/72	1.75	1.60	1.55	1.54	1.56	1.55	1.56	1.57	1.57	1.60	1.70	1.74	1.61
1972/73	1.67	1.61	1.82	2.12	2.41	2.54	2.78	2.80	2.56	2.59	2.61	2.77	2.36
1973/74	3.13	3.43	4.88	5.20	4.95	4.81	5.27	5.72	6.01	5.26	4.19	3.69	4.71
1974/75	4.30	4.66	4.57	4.57	5.17	5.16	5.01	4.45	4.15	3.94	3.88	3.48	4.44
1975/76	3.33	3.79	4.27	4.39	4.23	3.85	3.73	3.80	4.03	3.90	3.71	3.55	3.88
1976/77	3.60	3.58	3.25	3.25	3.02	2.94	2.78	2.88	2.98	2.95	2.96	2.93	3.10
1977/78	2.79	2.88	2.88	2.80	2.75	2.91	2.97	3.17	3.33	3.41	3.62	3.60	3.09
1978/79	3.60	3.74	3.72	3.77	3.76	3.76	3.71	3.70	3.65	3.70	3.70	3.91	3.73
1979/80	4.46	4.67	4.45	4.31	4.13	4.16	4.10	4.10	4.26	4.13	4.02	3.91	4.23
1980/81	3.92	4.15	4.06	4.23	4.48	4.68	4.40	4.52	4.52	4.41	4.51	4.41	4.36
1981/82	4.26	4.27	4.25	4.21	4.38	4.42	4.00	4.12	4.09	4.02	4.14	4.24	4.20
1982/83	4.18	4.13	4.16	4.29	4.29	4.44	4.45	4.52	4.59	4.68	4.62	4.35	4.39
1983/84	4.15	4.08	4.06	4.12	4.03	3.90	3.81	3.79	3.69	3.73	4.03	4.05	3.95
1984/85	4.03	3.73	3.74	3.70	3.73	3.78	3.76	3.77	3.83	3.93	3.94	3.91	3.82
1985/86	3.73	3.57	3.45	3.57	3.72	3.77	3.80	3.75	3.74	3.85	3.88	3.78	3.72
1986/87	3.03	2.75	2.68	2.70	2.78	2.84	2.86	2.93	3.07	3.07	2.99	3.09	2.90
1987/88	2.87	2.79	2.73	2.94	3.08	2.97	3.05	3.26	3.21	3.10	3.32	3.36	3.06
1988/89	3.79	4.05	4.15	4.39	4.46	4.68	4.81	4.98	4.97	4.81	4.63	4.66	4.53
1989/90	4.47	4.47	4.50	4.56	4.55	4.56	4.63	4.44	4.11	3.76	3.68	3.61	4.28
1990/91	3.59	3.44	3.21	3.10	2.87	2.86	2.89	2.92	3.03	3.20	3.35	3.43	3.16
1991/92	3.45	3.37	3.48	3.67	3.91	4.28	4.55	4.57	4.76	4.52	4.39	4.37	4.11
1992/93	4.46	4.19	3.99	4.33	4.34	4.21	4.20	4.34	4.05	3.85	3.77	3.53	4.11
1993/94	3.46	3.57	3.44	3.42	3.42	3.47	3.61	3.63					
MINNEAPOLIS, DARK NO. 1 SPRING (13% PROTEIN)													
1953/54	2.45	2.38	2.40	2.44	2.53	2.50	2.48	2.49	2.49	2.51	2.53	2.54	2.48
1954/55	2.53	2.56	2.55	2.64	2.67	2.66	2.64	2.65	2.63	2.65	2.62	2.69	2.62
1955/56	2.66	2.57	2.37	2.42	2.43	2.39	2.38	2.37	2.37	2.35	2.41	2.37	2.42
1956/57	2.34	2.41	2.30	2.30	2.29	2.39	2.36	2.37	2.35	2.33	2.32	2.27	2.34
1957/58	2.28	2.32	2.28	2.31	2.35	2.38	2.34	2.33	2.34	2.34	2.37	2.39	2.34
1958/59	2.44	2.36	2.10	2.13	2.17	2.16	2.14	2.12	2.13	2.12	2.13	2.17	2.18
1959/60	2.21	2.23	2.18	2.18	2.21	2.23	2.21	2.19	2.20	2.21	2.22	2.23	2.21
1960/61	2.24	2.21	2.09	2.10	2.13	2.13	2.13	2.14	2.13	2.13	2.14	2.17	2.15
1961/62	2.25	2.30	2.25	2.28	2.31	2.33	2.37	2.38	2.38	2.38	2.39	2.38	2.33
1962/63	2.37	2.39	2.34	2.35	2.40	2.42	2.41	2.40	2.41	2.41	2.42	2.38	2.39
1963/64	2.45	2.28	2.18	2.30	2.37	2.35	2.34	2.32	2.28	2.21	2.22	2.30	2.30
1964/65	2.05	1.71	1.70	1.76	1.80	1.81	1.80	1.79	1.78	1.77	1.76	1.77	1.79
1965/66	1.74	1.80	1.71	1.76	1.75	1.77	1.77	1.78	1.77	1.74	1.76	1.79	1.76
1966/67	1.92	2.02	2.04	2.05	1.97	1.95	1.95	1.90	1.89	1.94	1.92	1.96	1.96
1967/68	1.92	1.91	1.81	1.76	1.74	1.73	1.69	1.70	1.70	1.71	1.68	1.64	1.75
1968/69	1.60	1.54	1.53	1.60	1.64	1.65	1.61	1.62	1.61	1.62	1.61	1.60	1.60
1969/70	1.59	1.61	1.58	1.65	1.70	1.74	1.76	1.75	1.71	1.70	1.75	1.75	1.69
1970/71	1.78	1.81	1.81	1.88	1.91	1.92	1.88	1.83	1.79	1.74	1.75	1.72	1.82
1971/72	1.71	1.66	1.55	1.55	1.58	1.59	1.61	1.61	1.59	1.59	1.57	1.59	1.60
1972/73	1.56	1.63	1.79	2.00	2.10	2.16	2.41	2.42	2.26	2.32	2.37	2.52	2.13
1973/74	2.71	3.04	4.47	4.76	4.40	4.47	4.99	5.52	5.81	5.25	4.29	4.06	4.48
1974/75	4.70	5.04	4.82	4.85	5.46	5.54	5.18	4.53	4.26	4.18	4.19	4.34	4.76
1975/76	3.96	4.24	4.58	4.59	4.46	4.07	3.90	3.98	4.24	4.13	3.94	3.92	4.17
1976/77	4.19	4.04	3.51	3.25	3.09	2.98	2.95	3.01	3.04	2.99	2.91	2.76	3.23
1977/78	2.59	2.49	2.41	2.66	2.75	2.88	2.88	2.93	2.88	3.03	3.23	3.27	2.83
1978/79	3.19	3.08	3.11	3.23	3.40	3.47	3.34	3.30	3.32	3.38	3.44	3.72	3.33
1979/80	4.32	4.42	4.18	4.25	4.43	4.32	4.16	4.06	4.10	4.04	3.96	4.26	4.21
1980/81	4.29	4.65	4.29	4.30	4.70	4.85	4.67	4.71	4.67	4.52	4.60	4.61	4.57
1981/82	4.45	4.34	4.13	4.19	4.30	4.37	4.21	4.28	4.21	4.14	4.25	4.20	4.26
1982/83	4.12	4.13	3.92	3.94	3.93	4.01	3.90	3.88	3.90	4.08	4.41	4.37	4.05
1983/84	4.32	4.24	4.32	4.31	4.33	4.23	4.20	4.15	4.06	4.21	4.32	4.45	4.26
1984/85	4.45	4.31	3.93	3.78	3.84	3.85	3.68	3.71	3.75	3.78	3.89	3.81	3.90
1985/86	3.79	3.57	3.27	3.43	3.57	3.77	3.79	3.69	3.62	3.71	3.84	3.63	3.64
1986/87	2.91	2.69	2.59	2.64	2.77	2.91	2.88	3.03	2.95	2.94	2.91	2.95	2.85
1987/88	2.74	2.60	2.64	2.82	2.97	2.93	3.01	3.12	3.30	3.11	3.22	3.31	2.98
1988/89	4.21	4.05	4.19	4.27	4.28	4.15	4.22	4.44	4.40	4.56	4.49	4.54	4.32
1989/90	4.33	4.28	4.20	4.10	4.14	4.13	4.24	4.21	4.06	3.98	4.08	4.09	4.15
1990/91	3.90	3.54	3.01	2.78	2.80	2.75	2.79	2.82	2.85	3.00	3.09	3.11	3.04
1991/92	3.03	2.93	3.11	3.19	3.68	3.76	4.12	4.36	4.56	4.35	4.28	4.44	3.82
1992/93	4.42	4.03	3.49	3.51	3.55	3.68	3.72	3.90	3.75	3.75	3.67	3.47	3.75
1993/94	3.49	4.08	3.84	4.23	4.54	4.68	4.82	4.77					

Continued--

Appendix table 18--Wheat cash prices for leading classes at major markets, 1953/54-1993/94--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
						\$/bushel							
						MINNEAPOLIS, DARK NO. 1 SPRING (15% PROTEIN)							
1953/54	2.47	2.44	2.50	2.58	2.74	2.74	2.69	2.69	2.67	2.73	2.80	2.82	2.66
1954/55	2.82	2.91	2.78	2.82	2.84	2.87	2.85	2.83	2.77	2.78	2.78	2.86	2.83
1955/56	2.84	2.77	2.50	2.46	2.47	2.47	2.44	2.41	2.41	2.42	2.45	2.43	2.51
1956/57	2.41	2.46	2.40	2.42	2.45	2.50	2.44	2.42	2.39	2.40	2.40	2.36	2.42
1957/58	2.42	2.46	2.35	2.37	2.41	2.41	2.36	2.36	2.36	2.38	2.40	2.41	2.39
1958/59	2.46	2.41	2.19	2.22	2.26	2.26	2.24	2.22	2.22	2.21	2.21	2.25	2.26
1959/60	2.29	2.32	2.26	2.24	2.27	2.28	2.24	2.24	2.23	2.24	2.25	2.26	2.26
1960/61	2.27	2.26	2.14	2.17	2.16	2.16	2.16	2.16	2.16	2.16	2.18	2.21	2.18
1961/62	2.28	2.35	2.30	2.34	2.37	2.39	2.43	2.44	2.43	2.43	2.45	2.47	2.39
1962/63	2.47	2.50	2.45	2.49	2.53	2.56	2.55	2.54	2.55	2.51	2.50	2.43	2.51
1963/64	2.50	2.32	2.23	2.29	2.41	2.37	2.36	2.34	2.29	2.22	2.28	2.34	2.33
1964/65	2.06	1.73	1.73	1.77	1.81	1.82	1.80	1.79	1.79	1.79	1.78	1.79	1.81
1965/66	1.78	1.83	1.79	1.83	1.83	1.86	1.86	1.88	1.92	1.89	1.86	1.88	1.85
1966/67	1.98	2.06	2.07	2.05	1.99	1.97	1.95	1.91	1.91	1.95	1.93	1.97	1.98
1967/68	1.92	1.91	1.87	1.86	1.89	1.83	1.80	1.81	1.81	1.82	1.79	1.75	1.84
1968/69	1.73	1.68	1.68	1.78	1.85	1.81	1.77	1.84	1.82	1.84	1.81	1.82	1.79
1969/70	1.79	1.82	1.73	1.79	1.80	1.83	1.84	1.84	1.84	1.83	1.89	1.90	1.83
1970/71	1.92	1.90	1.87	1.92	1.96	1.97	1.90	1.90	1.87	1.82	1.83	1.82	1.89
1971/72	1.80	1.73	1.66	1.72	1.77	1.72	1.72	1.74	1.69	1.70	1.73	1.76	1.73
1972/73	1.70	1.74	1.96	2.09	2.14	2.22	2.42	2.42	2.29	2.33	2.39	2.57	2.19
1973/74	2.80	3.07	4.50	4.80	4.50	4.48	4.98	5.52	5.83	5.33	4.41	4.23	4.54
1974/75	5.07	5.36	5.07	5.20	5.63	5.62	5.38	4.80	4.49	4.53	4.41	4.23	4.54
1975/76	4.30	4.69	4.90	5.12	5.03	4.74	4.46	4.54	4.70	4.66	4.48	4.65	4.69
1976/77	4.75	4.44	3.79	3.56	3.41	3.30	3.14	3.13	3.15	3.13	3.09	2.91	3.48
1977/78	2.71	2.60	2.56	2.93	3.00	3.11	2.97	3.02	3.01	3.10	3.26	3.31	2.97
1978/79	3.24	3.16	3.18	3.31	3.45	3.48	3.34	3.35	3.48	3.55	3.54	3.81	3.41
1979/80	4.37	4.45	4.25	4.52	4.63	4.46	4.28	4.24	4.25	4.21	4.14	4.49	4.36
1980/81	4.52	4.90	4.75	4.97	5.16	5.28	5.07	5.06	5.05	4.92	5.12	5.10	4.99
1981/82	4.89	4.71	4.34	4.35	4.34	4.42	4.25	4.30	4.23	4.17	4.27	4.20	4.37
1982/83	4.13	4.24	4.04	4.16	4.14	4.23	4.06	4.02	4.00	4.18	4.49	4.46	4.18
1983/84	4.50	4.51	4.39	4.38	4.38	4.27	4.26	4.20	4.13	4.20	4.44	4.48	4.35
1984/85	4.48	4.34	4.29	4.23	4.27	4.28	4.24	4.23	4.22	4.24	4.39	4.29	4.29
1985/86	4.28	4.02	3.87	4.22	4.25	4.44	4.50	4.31	4.23	4.25	4.47	4.37	4.27
1986/87	3.44	3.31	3.22	3.21	3.34	3.53	3.29	3.52	3.57	3.68	3.82	4.22	3.51
1987/88	4.14	3.61	3.43	3.59	3.69	3.63	3.59	3.64	3.73	3.52	3.71	3.82	3.68
1988/89	4.57	4.54	4.36	4.39	4.39	4.30	4.30	4.43	4.40	4.56	4.47	4.57	4.44
1989/90	4.48	4.44	4.17	4.07	4.14	4.11	4.22	4.21	4.05	3.96	4.07	4.09	4.17
1990/91	3.94	3.58	3.18	3.16	3.14	3.11	3.05	3.04	3.05	3.18	3.22	3.26	3.24
1991/92	3.20	3.09	3.23	3.30	3.76	3.84	4.18	4.40	4.59	4.45	4.36	4.52	3.91
1992/93	4.71	4.18	4.33	5.18	5.12	5.05	4.64	4.92	4.69	4.81	4.58	4.59	4.73
1993/94	4.97	5.75	6.06	5.87	6.60	7.19	6.61	6.30					
						MINNEAPOLIS: NO. 1 DARK NO. SPRING (14% PROTEIN)							
1971/72	1.74	1.73	1.66	1.72	1.77	1.72	1.72	1.74	1.69	1.70	1.73	1.76	1.72
1972/73	1.70	1.74	1.96	2.09	2.14	2.22	2.42	2.42	2.29	2.33	2.39	2.57	2.19
1973/74	2.80	3.07	4.50	4.80	4.50	4.48	4.98	5.52	5.83	5.33	4.41	4.23	4.54
1974/75	4.86	4.96	4.96	5.03	5.57	5.58	5.25	4.65	4.37	4.32	4.35	4.29	4.85
1975/76	4.19	4.48	4.75	4.82	4.71	4.38	4.17	4.23	4.44	4.38	4.24	4.26	4.42
1976/77	4.43	4.25	3.65	3.41	3.26	3.16	3.05	3.05	3.08	3.05	3.02	2.83	3.35
1977/78	2.65	2.54	2.48	2.75	2.87	2.96	2.92	2.94	2.90	3.03	3.23	3.27	2.88
1978/79	3.21	3.11	3.13	3.26	3.41	3.47	3.32	3.30	3.36	3.42	3.45	3.73	3.35
1979/80	4.32	4.42	4.19	4.29	4.45	4.29	4.17	4.07	4.08	4.02	3.96	4.31	4.21
1980/81	4.33	4.69	4.55	4.56	4.82	4.95	4.77	4.81	4.78	4.67	4.80	4.77	4.71
1981/82	4.56	4.50	4.25	4.23	4.29	4.38	4.22	4.28	4.21	4.16	4.25	4.20	4.29
1982/83	4.13	4.16	3.96	4.02	4.00	4.08	3.96	3.93	3.92	4.08	4.40	4.40	4.09
1983/84	4.39	4.38	4.34	4.33	4.33	4.25	4.21	4.17	4.08	4.24	4.37	4.45	4.30
1984/85	4.45	4.34	4.07	3.97	4.03	4.02	3.92	3.90	3.92	3.94	4.36	4.02	4.08
1985/86	3.99	3.77	3.56	3.76	3.91	4.09	4.16	3.97	3.90	4.00	4.17	4.03	3.94
1986/87	3.17	3.00	2.86	2.85	2.98	3.09	3.04	3.08	3.13	3.19	3.17	3.24	3.07
1987/88	3.07	2.94	2.94	3.04	3.15	3.11	3.13	3.24	3.32	3.15	3.30	3.42	3.15
1988/89	4.32	4.23	4.24	4.32	4.33	4.22	4.26	4.44	4.40	4.56	4.47	4.55	4.36
1989/90	4.41	4.36	4.18	4.08	4.14	4.12	4.23	4.21	4.06	3.96	4.08	4.09	4.16
1990/91	3.96	3.56	3.05	2.84	2.85	2.80	2.82	2.83	2.85	3.00	3.07	3.10	3.06
1991/92	3.04	2.94	3.10	3.21	3.68	3.78	4.11	4.36	4.56	4.36	4.28	4.44	3.82
1992/93	4.42	4.04	3.65	3.79	3.85	3.94	3.88	4.05	3.87	3.87	3.80	3.71	3.91
1993/94	3.96	4.80	4.88	4.90	5.17	5.50	5.45	5.32					
						MINNEAPOLIS, NO. 1 HARD AMBER DURUM							
1971/72	1.74	1.70	1.64	1.65	1.68	1.67	1.70	1.72	1.70	1.71	1.72	1.73	1.70
1972/73	1.73	1.76	1.89	2.05	2.14	2.16	2.39	2.51	2.45	2.52	2.52	2.62	2.23
1973/74	2.89	4.04	7.52	7.08	5.90	6.26	7.57	8.11	8.32	7.43	5.97	6.51	6.47
1974/75	6.37	7.17	6.66	6.70	7.17	7.16	6.16	5.98	6.08	5.87	6.33	6.23	6.49
1975/76	5.37	5.58	6.22	6.25	5.89	5.26	4.67	4.61	4.69	4.68	4.43	4.25	5.16
1976/77	4.23	4.05	3.51	3.33	3.16	3.14	2.96	2.97	3.05	3.10	3.09	3.03	3.30
1977/78	2.84	2.84	2.80	3.12	3.42	3.54	3.51	3.62	3.61	3.60	3.72	3.79	3.37
1978/79	3.72	3.56	3.55	3.52	3.69	3.70	3.53	3.60	3.64	3.72	3.71	3.98	3.66
1979/80	4.75	4.99	4.88	5.27	5.80	5.38	4.99	4.93	5.05	4.98	4.89	5.21	5.09
1980/81	5.79	7.12	7.19	7.26	7.34	7.22	6.90	7.07	7.02	6.66	6.10	6.04	6.81
1981/82	4.86	4.91	4.75	4.56	4.60	4.58	4.51	4.59	4.57	4.45	4.45	4.49	4.61
1982/83	4.38	4.26	4.07	4.02	4.11	4.17	4.07	4.06	4.12	4.28	4.54	4.90	4.25
1983/84	4.76	4.74	5.04	5.10	4.99	4.91	4.82	4.81	4.69	4.70	4.74	4.71	4.83
1984/85	4.68	4.57	4.65	4.43	4.47	4.46	4.43	4.34	4.37	4.33	4.36	4.32	4.45
1985/86	4.16	4.05	3.99	4.07	4.03	4.08	4.09	4.01	4.01	3.99	4.07	4.24	4.07
1986/87	3.79	3.08	3.04	3.21	3.31	3.49							

Appendix table 19--Domestic and foreign wheat prices, 1981-93

Year and month	United States				Foreign		
	Farm 1/	Kansas City 2/	Gulf ports 3/	Rotterdam 4/	Argentina 5/	Canada 6/	Australia 7/
	\$/metric ton						
Calendar year:							
1981	142	160	176	210	190	194	175
1982	129	147	161	187	166	165	160
1983	132	145	158	185	138	169	161
1984	127	140	153	180	135	166	153
1985	117	125	137	169	106	173	141
1986	100	107	117	148	88	161	120
1987	94	104	114	141	89	134	115
1988	122	134	146	176	125	177	150
1989	142	160	171	190	151	202	176
1990	110	126	137	164	107	158	144
1991	101	116	129	154	99	141	137
1992	125	143	152	188	122	177	8/ 166
1993	118	130	141	200	8/ 131	192	NA
1989:							
January	148	162	175	205	NQ	213	179
February	148	161	173	207	NQ	212	178
March	150	166	179	192	NQ	210	183
April	148	164	176	192	NQ	207	179
May	147	167	177	193	NQ	209	182
June	141	161	170	187	156	204	178
July	139	157	168	185	155	204	175
August	137	155	165	181	155	196	170
September	137	153	164	180	149	188	171
October	138	156	165	183	149	190	172
November	137	159	168	183	147	191	174
December	139	161	170	191	149	194	176
1990:							
January	136	158	169	193	143	193	174
February	131	151	162	186	137	189	165
March	128	148	157	178	123	191	161
April	128	151	162	182	124	179	165
May	125	143	151	179	122	171	159
June	113	131	136	171	119	165	149
July	103	114	125	152	112	148	134
August	95	105	118	143	95	139	127
September	90	104	115	142	79	130	125
October	89	102	116	144	79	128	125
November	88	101	114	144	74	126	124
December	88	102	114	150	74	132	124
1991:							
January	89	99	112	143	73	132	120
February	89	101	115	143	67	134	121
March	93	107	121	136	87	136	127
April	96	109	122	143	113	137	130
May	97	110	123	143	108	136	133
June	94	109	121	147	108	135	132
July	92	107	118	146	100	130	127
August	97	113	126	149	103	137	133
September	103	121	133	158	107	146	141
October	113	133	147	171	106	156	153
November	119	137	150	177	107	160	158
December	126	148	162	186	106	157	168
1992:							
January	130	166	171	193	113	183	176
February	139	165	177	197	122	190	186
March	137	158	170	194	133	184	178
April	134	150	160	195	122	179	171
May	134	143	150	197	121	184	165
June	126	143	148	183	130	186	164
July	116	128	137	181	132	167	155
August	111	119	129	173	130	150	145
September	118	130	139	NQ	113	165	157
October	118	131	141	181	115	174	NA
November	121	138	148	188	115	179	NA
December	122	139	148	188	117	181	NA
1993:							
January	124	144	156	192	122	187	NA
February	122	136	149	187	130	183	NA
March	121	137	149	183	124	182	NA
April	120	131	142	183	125	173	NA
May	114	128	136	184	132	166	NA
June	104	120	122	181	134	170	NA
July	105	119	129	196	132	180	NA
August	109	118	131	208	136	194	NA
September	114	119	132	202	142	201	NA
October	118	123	137	217	NA	210	NA
November	128	136	147	224	NA	226	NA
December	132	147	159	242	NA	236	NA

NA = Not available. NQ = No quotes.

1/ All wheat, U.S. season average. 2/ No. 1, hard red winter, ordinary protein. 3/ No. 2, hard red winter, ordinary protein, f.o.b. vessel. 4/ U.S., no. 2 dark northern spring, 14 percent, c.i.f. 5/ f.o.b. Buenos Aires. 6/ No. 1, Canadian western red spring, 13.5 percent in-store, St. Lawrence. 7/ Australian standard wheat, f.o.b. 8/ 9-month average.

Appendix table 20--Wheat flour: Supply and disappearance, United States, 1960-93

Calendar year	Wheat ground	Millfeed production	Flour production 1/	Flour and product imports 2/	Total supply	Exports		Domestic disappearance	Total population July 1	Per capita disappearance
						Flour	Products 2/			
	-----1,000----- bushels	----- tons	-----1,000 cwt-----						Million	Pounds
1960	582,719	4,827	255,596	141	255,737	42,135	58	213,544	180.7	118
1961	591,999	4,858	260,709	131	260,840	43,528	42	217,270	183.7	118
1962	595,353	4,876	262,403	132	262,535	47,719	22	214,794	186.5	115
1963	589,245	4,794	260,291	136	260,427	44,498	19	215,910	189.2	114
1964	591,654	2,890	261,905	142	262,047	42,328	26	219,693	191.8	115
1965	564,724	4,645	250,591	145	250,736	30,597	194	219,945	194.2	113
1966	568,673	4,619	253,176	179	253,355	33,091	178	220,086	196.5	112
1967	549,801	4,423	245,390	222	245,612	21,056	16	224,540	198.6	113
1968	569,649	4,511	254,310	233	254,543	28,068	133	226,342	200.6	113
1969	567,956	4,458	254,194	274	254,468	26,333	158	227,977	202.6	113
1970	563,714	4,409	253,094	325	253,419	26,054	14	227,351	205.1	111
1971	555,092	4,279	249,810	341	250,151	20,685	15	229,451	207.7	111
1972	557,801	4,303	250,441	477	250,918	20,335	19	230,564	209.9	110
1973	567,287	4,395	254,661	550	255,211	16,107	26	239,078	211.9	113
1974	562,962	4,483	251,097	665	251,762	14,453	33	237,276	213.9	111
1975	582,675	4,701	258,985	621	259,606	12,364	22	247,220	216.0	115
1976	618,284	4,920	275,077	604	275,681	16,064	44	259,573	218.0	119
1977	618,125	4,787	275,784	604	276,388	22,053	37	254,298	220.2	116
1978	621,321	4,860	277,950	773	278,723	22,170	43	256,510	222.6	115
1979	636,375	4,945	284,051	823	284,874	22,927	86	261,861	225.1	117
1980	628,559	4,866	282,655	904	283,559	17,378	54	266,127	227.7	117
1981	634,381	5,045	583,966	1,166	585,132	18,655	84	566,393	229.9	116
1982	653,206	5,228	290,907	1,496	292,403	20,926	154	271,323	232.2	117
1983	698,951	5,655	311,587	1,590	313,177	37,315	150	275,712	234.3	118
1984	675,274	5,426	299,832	2,040	301,872	20,179	162	281,531	236.3	119
1985	700,151	5,556	313,815	2,169	315,984	18,614	143	297,227	238.5	125
1986	737,537	5,799	326,316	2,307	328,623	26,160	124	302,338	240.7	126
1987	767,507	6,260	341,565	2,684	344,249	28,880	144	315,225	242.8	130
1988	769,699	6,163	344,154	2,742	346,896	24,097	185	322,614	245.0	132
1989	761,021	6,072	342,762	3,316	346,078	26,724	180	319,173	247.3	129
1990	788,186	6,109	354,348	3,600	357,948	18,642	273	339,033	249.9	136
1991	808,966	6,436	362,311	4,036	366,347	20,114	440	345,793	252.6	137
1992	833,339	6,707	370,829	4,996	375,825	20,711	619	354,495	255.5	139
1993 3/	855,649	6,936	379,333	6,181	385,514	23,235	548	361,731	258.2	140

1/ Commercial production of wheat flour, whole wheat, industrial, and durum flour and farina reported by Bureau of Census. Production prior to 1970 includes estimate for noncommercial wheat milled. 2/ Imports and exports of macaroni and noodle products (flour equivalent), reporting methods changed in 1990. 3/ Preliminary.

Appendix table 21--U.S. wheat production costs and returns, 1980-94

Item	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992F	1993F	1994F
Dollars per planted acre															
Production cash costs and returns:															
Gross value of production (excluding direct Government payments):															
Wheat	112.41	114.35	110.32	128.52	113.97	93.52	66.06	76.21	95.89	99.90	94.27	72.68	112.08	NA	NA
Wheat straw 1/	4.07	4.61	4.37	4.45	4.48	2.48	2.06	2.18	3.78	3.45	1.52	1.21	1.72	NA	NA
Total, gross value of production	116.48	118.96	114.69	132.97	118.45	96.00	68.12	78.39	99.67	103.35	95.79	73.89	113.80	NA	NA
Cash expenses:															
Seed	6.51	7.19	6.65	6.37	6.48	7.59	7.29	6.62	6.69	7.68	7.69	5.87	5.78	5.89	6.23
Fertilizer, lime, and gypsum	13.86	17.61	17.56	18.36	18.37	15.91	14.53	13.07	15.34	16.70	14.59	15.30	15.13	15.05	15.40
Chemicals	2.23	2.41	3.16	3.27	3.19	4.26	4.06	3.82	3.82	5.02	5.45	5.73	5.92	6.10	6.20
Custom operations 2/	2.94	4.54	5.86	6.02	6.04	4.17	4.12	4.12	3.89	4.11	4.56	4.25	4.23	4.19	4.31
Fuel, lube, and electricity	10.62	12.33	11.77	11.06	9.54	9.93	6.74	7.56	7.37	7.96	8.72	8.96	8.80	8.82	9.06
Repairs	7.23	7.80	7.18	7.77	7.49	6.56	6.17	6.32	6.41	6.39	6.51	6.70	6.88	7.08	7.27
Hired labor	2.88	3.00	3.02	3.21	3.15	2.43	2.54	2.53	2.59	4.95	4.92	5.34	5.52	5.70	5.83
Other variable cash expenses 3/	0.49	0.41	0.82	0.71	0.75	0.25	0.22	0.20	0.20	0.20	0.20	0.18	0.18	0.18	0.18
Total, variable cash expenses	46.76	55.29	56.03	56.77	55.01	51.10	45.67	45.67	44.24	53.01	52.64	52.33	52.44	53.01	54.48
General farm overhead	7.08	7.39	7.11	8.05	8.62	5.10	4.69	6.01	6.89	5.01	6.47	5.15	5.25	5.36	5.48
Taxes and insurance	7.33	7.39	6.90	7.69	7.86	7.44	7.92	8.11	8.19	8.72	10.28	8.88	9.26	9.64	9.89
Interest	14.58	19.81	18.45	21.86	22.98	12.69	9.08	10.09	9.57	8.77	10.99	5.89	5.54	5.24	5.62
Total, fixed cash expenses	28.99	34.59	32.46	37.60	39.46	25.23	21.69	24.21	24.65	22.50	27.74	19.92	20.05	20.24	20.99
Total, cash expenses	75.75	89.88	88.49	94.37	94.47	76.33	67.36	69.88	68.89	75.51	80.38	72.25	72.49	73.25	75.47
Gross value of production less cash expenses	40.73	29.08	26.20	38.60	23.98	19.67	0.76	8.51	30.78	27.84	15.41	1.64	41.31	NA	NA
Harvest-period price (dollars/bu.)	3.76	3.63	3.38	3.48	3.37	2.98	2.29	2.39	3.50	3.81	2.78	2.57	3.32	NA	NA
Yield (bu./planted acre)	29.87	31.47	32.64	36.89	33.79	31.41	28.79	31.87	27.42	26.22	33.91	28.28	33.77	NA	NA
Dollars per planted acre															
Production economic costs and returns:															
Gross value of production (excluding direct Government payments):															
Wheat	112.41	114.35	110.32	128.52	113.97	93.52	66.06	76.21	95.89	99.90	94.27	72.68	112.08	NA	NA
Wheat straw	4.07	4.61	4.37	4.45	4.48	2.48	2.06	2.18	3.78	3.45	1.52	1.21	1.72	NA	NA
Total, gross value of production	116.48	118.96	114.69	132.97	118.45	96.00	68.12	78.39	99.67	103.35	95.79	73.89	113.80	NA	NA
Economic (full ownership) costs:															
Variable cash expenses	46.76	55.29	56.03	56.77	55.01	51.10	45.67	45.67	44.24	53.01	52.64	52.33	52.44	53.01	54.48
General farm overhead	7.08	7.39	7.11	8.05	8.62	5.10	4.69	6.01	6.89	5.01	6.47	5.15	5.25	5.36	5.48
Taxes and insurance	7.33	7.39	6.90	7.69	7.86	7.44	7.92	8.11	8.19	8.72	10.28	8.88	9.26	9.64	9.89
Capital replacement	18.15	19.30	19.41	21.02	20.48	19.63	19.90	20.33	20.67	9.66	9.89	10.60	10.89	11.21	11.50
Operating capital	2.83	3.91	3.09	2.51	2.72	2.11	1.38	1.46	1.78	2.12	1.97	1.42	0.88	0.77	1.04
Other nonland capital	3.64	3.46	3.24	3.19	3.84	3.67	3.66	3.69	4.33	9.67	10.67	12.18	11.89	12.21	12.51
Land	30.06	29.44	29.75	34.41	29.78	30.81	23.30	24.87	31.38	47.57	46.33	33.92	44.49	41.89	41.32
Unpaid labor	6.40	6.67	6.72	7.14	7.01	5.40	5.66	5.63	5.77	8.67	11.24	9.48	9.79	10.12	10.35
Total, economic (full ownership) costs	122.25	132.85	132.25	140.78	135.31	125.26	112.18	115.77	123.25	144.43	149.49	133.96	144.89	144.21	146.57
Residual returns to management and risk	-5.77	-13.89	-17.56	-7.81	-16.86	-29.26	-44.06	-37.38	-23.58	-41.08	-53.70	-60.07	-31.09	NA	NA
Harvest-period price (dollars/bu.)	3.76	3.63	3.38	3.48	3.37	2.98	2.29	2.39	3.50	3.81	2.78	2.57	3.32	NA	NA
Yield (bu./planted acre)	29.87	31.47	32.64	36.89	33.79	31.41	28.79	31.87	27.42	26.22	33.91	28.28	33.77	NA	NA

1/ Includes value of wheat grazing in Southern Plains before 1985. 2/ Includes cost of technical services. 3/ Includes cost of purchased irrigation water.
 NA = Not available. F = Forecasts as of January 24, 1994 by using 1991 as a base year. (Contact Judith Sommer or Mir Ali, 202-219-0802).

Methods and procedures used for estimating various components of gross value of production, cash costs, economic costs, and returns are outlined in "Economic Indicators of the Farm Sector: Cost-of-Production, Major Field Crops and Livestock and Dairy, 1991." Agriculture and Rural Economy Division, Economic Research Service, U.S. Dept. of Agriculture, ECIFS 11-3, 1994.

Appendix table 22--On-farm receipts of major crops, United States, 1983-94 1/

Receipts 2/	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 P	1993 F	1994 F
Billion dollars												
Food grains	9.7	9.7	9.0	5.7	5.8	7.5	8.2	7.5	7.4	8.9	8	8-10
Wheat	8.8	8.6	7.9	5.0	5.0	6.4	7.3	6.4	6.3	7.6	7	7-9
Rice	0.9	1.1	1.0	0.7	0.7	1.1	0.9	1.1	1.1	1.2	1	1-2
Feed grains and hay	15.5	15.7	22.5	17.2	14.6	14.3	17.1	18.7	19.5	20.1	18	20-24
Corn	10.9	10.9	16.9	12.3	9.9	8.9	11.4	13.3	14.4	14.8	12	15-17
Oats	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.1	0.2	NA	NA
Barley	1.0	1.1	1.0	0.8	0.8	0.9	0.8	0.8	0.8	0.9	NA	NA
Sorghum	1.2	1.5	2.0	1.3	1.1	1.1	1.2	1.0	1.2	1.4	NA	NA
Hay	2.2	2.4	2.4	2.2	2.5	3.1	3.4	3.3	3.0	2.9	NA	NA
Oil crops 3/	13.5	13.6	12.5	10.6	11.2	13.5	11.9	12.3	12.7	13.0	13	15-17
Soybeans	12.2	12.0	11.2	9.2	10.0	12.1	10.5	10.8	11.0	11.3	12	13-16
Peanuts	0.8	1.2	1.0	1.1	1.0	1.1	1.1	1.3	1.4	1.3	1	1-2
Other oil crops	0.5	0.4	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.4	NA	NA
Cotton (incl. seed)	3.7	3.7	3.7	3.4	4.2	4.5	5.0	5.5	5.1	5.2	5	4-6
Tobacco	2.8	2.8	2.7	1.9	1.8	2.1	2.4	2.7	2.9	3.0	3	1-3
Fruits and nuts	6.1	6.7	6.9	7.3	8.1	9.0	9.2	9.4	9.9	10.2	10	9-12
Vegetables	8.5	9.2	8.6	8.9	9.9	9.8	11.6	11.5	11.5	11.4	12	11-13
Other crops 4/	7.4	8.0	8.3	9.1	10.2	11.0	11.7	12.6	12.8	13.1	NA	NA
Total crops	67.2	69.9	74.3	63.7	65.8	71.6	76.8	80.1	81.9	84.8	82	85-89

NA = Not available.

1/ Includes net Commodity Credit Corporation loans. 2/ Calendar year. 3/ Not including cottonseed. 4/ Includes sugar, seed, green house, nursery, and other miscellaneous crops. P = Preliminary, F = Forecast.

Appendix table 23--Wheat base acres and conservation reserve program by State 1/

State	Signups								
	1985 Farm Act			1990 Farm Act			Total enrolled acres 1-12	Total retired ---base acres--- 1-12	Retired wheat 1-12
	Total enrolled acres 1-9	Total retired ---base acres--- 1-9	Retired wheat 1-9	Total enrolled acres 10-12	Total retired ---base acres--- 10-12	Retired wheat 10-12			
Alabama	519,530	198,930	104,354	53,661	27,590	9,277	573,191	226,520	113,630
Alaska	24,701	16,332	24	648	177	0	25,348	16,509	24
Arkansas	225,354	120,801	64,969	34,653	19,905	10,601	260,006	140,706	75,570
California	183,054	93,846	24,025	4,445	2,749	89	187,499	96,594	24,115
Colorado	1,953,042	1,119,255	803,076	25,349	14,107	11,720	1,978,391	1,133,362	814,796
Connecticut	10	10	0	0	0	0	10	10	0
Delaware	984	607	80	11	5	5	995	612	85
Florida	123,013	45,966	16,331	11,847	4,816	1,981	134,860	50,782	18,312
Georgia	663,156	358,412	179,148	43,303	25,757	11,440	706,459	384,169	190,588
Hawaii	85	0	0	0	0	0	85	0	0
Idaho	791,061	499,224	254,384	85,998	60,456	34,860	877,059	559,680	289,244
Illinois	633,580	372,111	112,832	178,346	106,328	38,347	811,926	478,439	151,179
Indiana	364,729	204,303	50,772	97,920	54,696	14,454	462,649	258,999	65,226
Iowa	1,970,158	1,214,889	37,089	254,676	158,942	4,736	2,224,834	1,373,831	41,825
Kansas	2,861,786	2,102,380	1,265,724	76,077	59,446	36,906	2,937,863	2,161,826	1,302,630
Kentucky	416,799	222,429	81,558	34,518	19,232	8,303	451,317	241,661	89,861
Louisiana	132,907	54,864	16,262	13,663	7,202	2,299	146,571	62,066	18,561
Maine	37,222	6,288	124	1,268	383	2	38,490	6,671	126
Maryland	16,059	8,358	1,587	4,333	2,496	512	20,392	10,854	2,100
Massachusetts	32	21	0	0	0	0	32	21	0
Michigan	196,305	107,254	22,079	136,549	78,717	17,701	332,853	185,971	39,780
Minnesota	1,830,672	1,228,619	390,716	98,281	64,776	21,094	1,928,954	1,293,396	411,810
Mississippi	726,898	250,890	137,434	114,928	51,272	19,278	841,826	302,162	156,712
Missouri	1,504,413	734,868	370,552	222,422	102,026	51,149	1,726,835	836,895	421,701
Montana	2,720,133	1,761,101	987,710	134,174	87,091	64,053	2,854,308	1,848,192	1,051,763
Nebraska	1,348,930	884,893	312,479	76,494	50,726	14,978	1,425,423	935,619	327,457
Nevada	3,124	839	225	0	0	0	3,124	839	225
New Jersey	661	162	48	62	2	0	723	184	48
New Mexico	480,765	391,794	239,533	2,416	1,816	626	483,181	393,611	240,159
New York	54,606	22,427	2,727	9,892	3,445	685	64,498	25,872	3,412
North Carolina	137,040	64,097	23,235	13,968	6,523	2,365	151,008	70,620	25,601
North Dakota	3,137,199	2,089,409	1,123,219	43,371	28,633	14,827	3,180,569	2,118,042	1,138,046
Ohio	254,130	126,359	33,989	122,959	62,416	21,939	377,089	188,774	55,929
Oklahoma	1,155,450	927,347	696,612	37,054	30,695	24,290	1,192,504	958,041	720,902
Oregon	517,150	439,209	287,708	13,616	12,363	9,287	530,766	451,571	296,995
Pennsylvania	92,465	39,689	5,029	8,613	3,909	612	101,078	39,597	5,641
Puerto Rico	440	0	0	15	0	0	455	0	0
South Carolina	265,513	126,970	61,886	12,557	7,339	2,548	278,071	134,309	64,434
South Dakota	2,084,557	1,404,472	617,733	35,698	24,358	13,816	2,120,255	1,428,829	631,549
Tennessee	429,352	202,474	88,270	46,273	24,404	8,969	475,625	226,878	97,238
Texas	3,921,378	3,159,080	1,265,635	229,107	180,765	47,510	4,150,485	3,339,845	1,313,145
Utah	232,318	119,770	96,481	1,660	849	694	233,978	120,619	97,175
Vermont	187	16	0	6	1	0	193	17	0
Virginia	73,939	35,838	11,437	5,617	2,579	749	79,556	38,416	12,186
Washington	975,320	593,255	370,690	71,708	51,745	31,229	1,047,029	644,999	401,919
West Virginia	610	251	24	8	5	0	618	256	24
Wisconsin	604,060	292,146	13,673	142,470	73,815	3,738	746,530	365,960	17,411
Wyoming	257,022	125,171	104,338	202	89	0	257,224	125,260	104,338
Total	33,921,899	21,763,423	10,275,802	2,500,834	1,514,663	557,667	36,422,733	23,278,085	10,833,469

1/ Totals might not add because of independent rounding.

Appendix table 24--Wheat: Supply and disappearance, United States, 1911/12-1993/94

Marketing year 1/	Acreage harvested	Yield per harvested area	Production	Domestic use 2/	Exports	Ending stocks	Season-average farm price	Stocks-to-use ratio
	Million acres	Bushels	-----Million bu.-----				\$/bu.	Percent
1910/11	45.8	13.7	625.5	540.0	71.3	125.0	0.91	20.4
1911/12	49.9	12.4	618.2	554.0	81.9	110.0	0.87	17.3
1912/13	48.4	15.1	730.0	570.0	145.2	125.0	0.81	17.5
1913/14	52.0	14.4	751.1	616.0	148.0	115.0	0.79	15.1
1914/15	55.6	16.1	897.5	609.0	335.7	67.0	0.98	7.1
1915/16	60.3	16.7	1,008.6	609.0	246.2	225.0	0.96	26.3
1916/17	53.5	11.9	634.6	596.0	206.0	80.0	1.43	10.0
1917/18	46.8	13.2	619.8	556.0	132.6	40.0	2.05	5.8
1918/19	61.1	14.8	904.1	580.0	287.4	85.0	2.05	9.8
1919/20	73.7	12.9	952.1	647.0	222.0	170.0	2.16	19.6
1920/21	62.4	13.5	843.3	575.0	369.3	124.0	1.83	13.1
1921/22	64.6	12.7	819.0	579.0	282.6	96.0	1.03	11.1
1922/23	61.4	13.8	846.6	602.0	224.9	132.0	0.97	16.0
1923/24	56.9	13.3	759.5	619.0	159.9	137.0	0.93	17.6
1924/25	52.5	16.0	841.6	613.0	260.8	108.0	1.25	12.4
1925/26	52.4	12.8	668.7	585.0	108.0	97.0	1.44	14.0
1926/27	56.6	14.7	832.2	610.0	219.2	109.0	1.22	13.1
1927/28	59.6	14.7	875.1	678.0	206.3	113.0	1.19	12.8
1928/29	59.2	15.4	914.4	653.0	163.7	227.0	1.00	27.8
1929/30	63.4	13.0	824.2	616.0	153.2	291.0	1.04	37.8
1930/31	62.6	14.2	886.5	751.0	131.5	313.0	0.67	35.5
1931/32	57.7	16.3	941.5	753.0	135.8	375.0	0.39	42.2
1932/33	57.9	13.1	756.3	719.0	41.2	378.0	0.38	49.7
1933/34	49.4	11.2	552.2	628.0	37.0	273.0	0.74	41.1
1934/35	43.3	12.2	526.1	654.0	21.5	146.0	0.85	21.6
1935/36	51.3	12.2	628.2	661.0	15.9	140.0	0.83	20.7
1936/37	49.1	12.8	629.9	689.0	21.6	83.0	1.02	11.7
1937/38	64.2	13.6	873.9	697.0	107.2	153.0	0.96	19.0
1938/39	69.2	13.3	919.9	712.0	115.8	250.0	0.56	30.2
1939/40	52.7	14.1	741.2	663.0	54.3	280.0	0.69	39.0
1940/41	53.3	15.3	814.6	676.0	40.6	385.0	0.68	53.7
1941/42	55.9	16.9	942.0	667.0	35.8	631.0	0.94	89.8
1942/43	49.8	19.5	969.4	946.0	33.4	619.0	1.10	63.2
1943/44	51.4	16.4	843.8	1,237.0	51.1	317.0	1.36	24.6
1944/45	59.7	17.8	1,060.1	1,086.0	56.7	279.0	1.41	24.4
1945/46	65.2	17.0	1,107.6	965.0	318.7	100.0	1.49	7.8
1946/47	67.1	17.2	1,152.1	836.0	367.4	84.0	1.90	7.0
1947/48	74.5	18.2	1,358.9	903.0	479.8	196.0	2.29	14.2
1948/49	72.4	17.9	1,294.9	854.0	505.3	307.0	1.98	22.6
1949/50	75.9	14.5	1,098.4	800.0	308.2	425.0	1.88	38.4
1950/51	61.6	16.5	1,019.3	689.6	344.7	491.7	2.00	47.5
1951/52	61.9	16.0	988.2	694.6	485.5	329.7	2.11	27.9
1952/53	71.1	18.4	1,306.4	655.6	332.0	672.2	2.09	68.1
1953/54	67.8	17.3	1,173.1	643.7	213.6	993.6	2.04	115.9
1954/55	54.4	18.1	983.9	604.7	267.2	1,109.4	2.12	127.2
1955/56	47.3	19.8	937.1	603.9	322.2	1,130.2	1.98	122.0
1956/57	49.8	20.2	1,005.4	598.6	541.0	1,004.0	1.97	88.1
1957/58	43.8	21.8	955.7	589.7	418.5	962.2	1.93	95.4
1958/59	53.0	27.5	1,457.4	610.3	449.6	1,368.1	1.75	129.1
1959/60	51.7	21.6	1,117.7	606.9	501.8	1,384.2	1.76	124.8
1960/61	51.9	26.1	1,354.7	591.0	653.5	1,502.4	1.74	120.7
1961/62	51.6	23.9	1,232.4	604.4	715.7	1,420.6	1.83	107.6
1962/63	43.7	25.0	1,092.0	598.8	649.4	1,269.7	2.04	101.7
1963/64	45.5	25.2	1,146.8	581.5	845.6	993.5	1.85	69.6
1964/65	49.8	25.8	1,283.4	634.9	722.7	921.1	1.37	67.8
1965/66	49.6	26.5	1,315.6	725.3	851.8	660.5	1.35	41.9
1966/67	49.6	26.3	1,304.9	683.1	771.3	512.8	1.63	35.3
1967/68	58.4	25.8	1,507.6	625.8	765.3	630.2	1.39	45.3
1968/69	54.8	28.4	1,556.6	739.7	544.2	904.0	1.24	70.4
1969/70	47.1	30.6	1,442.7	764.0	603.0	982.6	1.25	71.9
1970/71	43.6	31.0	1,351.6	772.1	740.8	822.8	1.33	54.4
1971/72	47.7	33.9	1,618.6	849.3	609.8	983.4	1.34	67.4
1972/73	47.3	32.7	1,546.2	798.7	1,135.1	597.1	1.76	30.9
1973/74	54.1	31.6	1,710.8	753.4	1,217.0	340.1	3.95	17.3
1974/75	65.4	27.2	1,781.9	671.9	1,018.5	435.0	4.09	25.7
1975/76	69.5	30.6	2,126.9	725.8	1,172.9	665.6	3.56	35.1
1976/77	70.9	30.3	2,148.8	754.4	949.5	1,113.2	2.73	65.3
1977/78	66.7	30.7	2,045.5	859.0	1,123.8	1,177.8	2.33	59.4
1978/79	56.5	31.4	1,775.5	837.0	1,194.1	924.1	2.98	45.5
1979/80	62.5	34.2	2,134.1	783.1	1,375.2	902.0	3.80	41.8
1980/81	71.1	33.5	2,380.9	782.5	1,513.8	989.1	3.99	43.1
1981/82	80.6	34.5	2,785.4	847.2	1,770.7	1,159.4	3.69	44.3
1982/83	77.9	35.5	2,765.0	908.2	1,508.7	1,515.1	3.45	62.7
1983/84	61.4	39.4	2,419.8	1,113.8	1,426.4	1,398.6	3.51	55.1
1984/85	66.9	38.8	2,594.8	1,156.1	1,421.4	1,425.2	3.39	55.3
1985/86	64.7	37.5	2,424.1	1,051.5	909.1	1,905.0	3.08	97.2
1986/87	60.7	34.4	2,090.6	1,197.4	998.5	1,820.9	2.42	82.9
1987/88	55.9	37.7	2,107.7	1,096.0	1,587.9	1,260.8	2.57	47.0
1988/89	53.2	34.1	1,812.2	979.2	1,414.9	701.6	3.72	29.3
1989/90	62.2	32.7	2,036.6	993.3	1,232.0	536.5	3.72	24.1
1990/91	69.3	39.5	2,736.4	1,374.9	1,068.5	865.9	2.61	35.4
1991/92	57.7	34.3	1,981.1	1,136.6	1,279.9	471.9	3.00	19.5
1992/93 3/	62.4	39.4	2,458.9	1,118.1	1,353.6	529.2	3.24	21.4
1993/94 4/	62.6	38.3	2,402.1	1,213.0	1,225.0	588.2	3.10-3.25	24.1

1/ 1910/1911-1949/50 - July-June marketing year; starting 1950/51, June-May marketing year. 2/ 1941/42-1949/50-includes procurement for both civilian relief feeding and military food use. 3/ Estimate. 4/ Projected.

Appendix table 25--Quarterly government stock activity for wheat, 1991/92-1993/94

	-----1991/92-----				-----1992/93-----				-----1993/94-----	
	June-Aug.	Sept.-Nov.	Dec.-Feb.	March-May	June-Aug.	Sept.-Nov.	Dec.-Feb.	March-May	June-Aug.	Sept.-Nov.
	Million bushels									
9-month loans:										
Carryin outstanding	216.8	149.1	105.3	47.3	19.8	76.8	181.2	120.4	47.3	103.3
Loans made	67.4	64.6	9.5	1.7	74.2	134.2	28.1	3.8	94.6	127.8
Certificate exchange	1.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash redemption	67.9	47.8	63.6	29.1	17.2	29.8	88.9	76.9	38.5	38.6
CCC collateral acquired	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Reserve conversion	65.8	59.9	3.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Carryout outstanding	149.1	105.3	47.3	19.8	76.8	181.2	120.4	47.3	103.3	192.5
FOR loans:										
Carryin FOR	13.7	76.1	126.7	85.2	49.9	37.4	36.0	33.0	28.1	21.5
Reserve conversion	65.8	59.9	3.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Cash redemption	2.6	9.2	45.3	35.3	12.5	1.4	3.0	4.9	6.6	2.4
CCC collateral acquired	0.7	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Certificate exchange	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Carryout FOR	76.1	126.7	85.2	49.9	37.4	36.0	33.0	28.1	21.5	19.1
CCC owned:										
Carryin CCC	162.7	162.8	160.7	156.9	152.0	151.6	151.1	150.4	150.0	149.9
CCC collateral acquired	0.7	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Certificate exchange	0.1	0.2	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Other 1/	0.5	2.0	3.5	5.0	0.3	0.5	0.7	0.4	0.2	-0.4
Carryout CCC	162.8	160.7	156.9	152.0	151.6	151.1	150.4	150.0	149.9	150.3
Unencumbered carryin	472.7	1,652.7	1,050.8	597.8	250.2	1,841.8	1,222.2	739.5	303.8	1,881.2
Total carryin stocks	865.9	2,040.7	1,443.5	887.2	471.9	2,107.6	1,590.5	1,043.3	529.2	2,155.9

1/ Includes P.L. 480 exchanges for Title II, off-grade sales, domestic programs, Section 416 export program, and residual errors.

Appendix table 26--Rye: Supply, disappearance, area, and price, 1985/86-1993/94

Item	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93 1/	1993/94 2/
1,000 acres									
Area:									
Planted	2,543	2,334	2,428	2,374	2,014	1,625	1,671	1,582	1,493
Harvested	708	661	671	595	484	375	396	406	381
Bushels per acre									
Yield/harvested acre	28.8	28.8	29.1	24.7	28.2	27.1	24.6	29.4	27.1
Million bushels									
Supply:									
Beginning stocks	19.8	21.9	18.6	18.9	10.3	5.6	3.3	1.5	1.6
Production	20.4	19.1	19.5	14.7	13.6	10.2	9.8	12.0	10.3
Imports	2.2	1.0	1.2	0.2	0.0	3.9	4.5	3.1	3.5
Total supply	42.4	41.9	39.3	33.8	24.0	19.7	17.6	16.6	15.4
Disappearance:									
Food	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Feed and residual	10.9	13.7	10.6	11.4	9.0	7.7	7.6	6.5	5.4
Seed	3.8	3.7	3.8	3.2	3.0	3.0	3.0	3.0	3.0
Industry	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Total domestic	20.3	22.9	19.9	20.1	17.5	16.2	16.1	15.0	13.9
Exports	0.2	0.5	0.5	3.4	0.8	0.2	0.1	0.0	0.0
Total disappearance	20.5	23.4	20.4	23.5	18.3	16.4	16.1	15.0	13.9
Ending stocks	21.9	18.6	18.9	10.3	5.6	3.3	1.5	1.6	1.5
\$/bushel									
Prices:									
Loan rate	2.17	1.63	1.55	1.50	1.40	1.33	1.38	1.46	1.46
Season-average price	2.03	1.49	1.63	2.52	2.06	2.09	2.20	2.35	2.65
\$1,000									
Value of production	41,902	29,159	31,641	37,006	28,099	21,298	21,448	28,405	27,401

1/ Preliminary. 2/ Projected.

Appendix table 27--Rye: Production by major States, 1985-93

State	1985	1986	1987	1988	1989	1990	1991	1992	1993
1,000 bushels									
Georgia	2,070	1,785	1,540	1,890	1,610	1,320	1,300	1,560	1,380
Indiana	308	280	162	210	204	124	100	156	150
Michigan	651	713	640	650	825	580	360	496	420
Minnesota	3,300	1,600	1,200	920	1,088	868	648	720	667
Nebraska	1,242	1,035	1,150	1,375	600	750	1,000	1,040	500
N. Jersey	320	310	232	310	182	144	192	259	182
N. York	420	429	300	396	480	260	264	288	216
N. Carolina	665	595	600	780	525	345	500	360	750
N. Dakota	2,640	4,250	5,115	1,350	1,064	780	992	1,496	1,050
Oklahoma	828	840	360	720	532	420	665	798	660
Pennsylvania	740	630	525	684	576	496	297	720	340
S. Carolina	532	391	528	720	644	594	630	675	380
S. Dakota	4,440	4,440	5,040	2,250	3,240	1,870	1,152	1,666	1,600
Virginia	312	364	435	560	264	256	264	288	165

Appendix table 28--Wheat: Marketing year supply, disappearance, area, and price, 1985/86-1993/94

Item	1985/86	1986/87	1987/8	1988/89	1989/90	1990/91	1991/92	1992/93 1/	1993/94 2/
Million acres									
Area									
Planted	75.6	72.0	65.8	65.5	76.6	77.2	69.9	72.3	72.2
Harvested	64.7	60.7	55.9	53.2	62.2	69.3	57.7	62.4	62.6
Set aside and diverted	18.8	21.0	23.9	22.5	9.6	7.5	15.9	7.3	5.7
Conservation Reserve	---	0.6	4.2	7.1	8.8	3/ 10.3	10.4	10.6	10.8
National base acreage	94.0	92.2	91.8	91.9	91.1	90.8	89.6	89.6	89.6
Bushels per acre									
Yield/harvested acre	37.5	34.4	37.7	34.1	32.7	39.5	34.3	39.4	38.3
Million bushels									
Supply									
June 1 stocks	1,425	1,905	1,821	1,261	702	536	866	472	529
Production	2,424	2,091	2,108	1,812	2,037	2,736	1,981	2,459	2,402
Imports 3/	16	21	16	23	23	36	41	70	95
Total supply	3,865	4,017	3,945	3,096	2,762	3,309	2,888	3,001	3,026
Disappearance									
Food	674	712	721	726	749	785	789	829	840
Seed	93	84	85	103	105	93	98	98	98
Feed and residual 4/	284	401	290	150	140	496	250	191	275
Total domestic	1,051	1,197	1,096	979	993	1,375	1,137	1,118	1,213
Exports 3/	909	999	1,588	1,415	1,232	1,068	1,280	1,354	1,225
Total disappearance	1,960	2,196	2,684	2,394	2,225	2,443	2,416	2,472	2,438
May 31 stocks	1,905	1,821	1,261	702	536	866	472	529	588
Prices									
Received by farmers	3.08	2.42	2.57	3.72	3.72	2.61	3.00	3.24	3.10-3.25
Loan rate	3.30	2.40	2.28	2.21	2.06	1.95	2.04	2.21	2.45
Target	4.38	4.38	4.38	4.23	4.10	4.00	4.00	4.00	4.00
\$ million									
Value of production	7,374	5,044	5,497	6,741	7,542	7,184	5,957	7,984	7,627

-- = Not applicable.

1/ Preliminary. 2/ Projected. 3/ Imports and exports include flour and other products expressed in wheat equivalent. 4/ Residual, approximates feed use and includes negligible quantities used for alcoholic beverages.

Appendix table 29--Wheat: Production by major States, 1985-93

State	1985	1986	1987	1988	1989	1990	1991	1992	1993
Million bushels									
Arkansas	18.2	33.4	34.4	56.7	52.8	49.0	20.5	39.1	40.0
Colorado	139.3*	96.4	97.4	79.5	62.1	87.0	74.0	72.6	97.0
Idaho	72.0	81.8	85.5	75.5	91.4	99.6	81.7	100.0	110.4*
Illinois	36.8	36.1	56.1	67.5	105.0*	88.8	44.8	62.1	68.2
Kansas	433.2	336.6	366.3	323.0	213.6	472.0*	363.0	363.8	388.5
Minnesota	142.4*	103.7	102.6	51.7	102.5	138.6	67.1	139.9	71.2
Missouri	49.9	18.8	35.4	76.0	87.0	76.0	48.0	64.8	53.2
Montana	50.2	138.5	151.2	60.0	145.0	145.9	159.5	139.6	204.5
Nebraska	89.7	76.0	85.8	72.0	55.4	85.5	67.2	55.5	73.5
N. Dakota	323.3	292.3	269.1	103.4	242.3	385.2	303.7	469.9*	335.1
Oklahoma	165.0	150.8	129.6	172.8	153.9	201.6	140.0	171.1	162.0
Oregon	56.0	58.4	52.9	51.8	53.8	57.6	43.9	47.8	65.0
S. Dakota	111.2	108.7	106.7	38.0	83.1	128.0*	96.2	119.6	111.5
Texas	187.2*	120.0	100.8	89.6	60.0	130.2	84.0	129.2	118.4
Washington	128.3	116.9	114.3	124.6	110.6	150.1	98.6	119.6	177.6

* Record production since 1949.

Appendix table 30--Former Soviet Union wheat: Supply and disappearance, 1960/61-1993/94

Year Beginning July 1	Supply						Disappearance					Ending stocks
	Area harvested	Yield	Pro- duction	Begin- ning stocks	Imports	Total	Domestic use			Exports	Total disap- pearance	
							Feed	Nonfeed	Total			
	1,000 ha	Mt/ha	-----1,000 metric tons-----									
1960/61	60,393	0.98	59,350	NA	585	59,935	12,452	41,463	53,915	5,020	58,935	NA
1961/62	63,000	0.98	61,770	NA	239	62,009	16,261	43,410	59,671	5,338	65,009	NA
1962/63	67,411	0.98	65,735	NA	242	65,977	11,644	47,589	59,233	5,744	64,977	NA
1963/64	64,609	0.71	46,142	NA	9,746	55,888	5,086	45,147	50,233	2,655	52,888	NA
1964/65	67,887	1.01	68,874	NA	2,222	71,096	12,601	46,298	58,899	2,197	61,096	NA
1965/66	70,205	0.79	55,677	NA	8,549	64,226	23,576	47,019	70,595	2,631	73,226	NA
1966/67	69,958	1.33	93,227	NA	3,082	96,309	21,015	43,907	64,922	4,387	69,309	NA
1967/68	67,026	1.07	71,977	NA	1,508	73,485	24,162	45,029	69,191	5,294	74,485	NA
1968/69	67,231	1.29	86,526	NA	215	86,741	31,438	47,474	78,912	5,829	84,741	NA
1969/70	66,426	1.11	73,945	NA	1,147	75,092	37,114	50,537	87,651	6,441	94,092	NA
1970/71	65,230	1.42	92,601	NA	484	93,085	43,478	50,404	93,882	7,203	101,085	NA
1971/72	64,035	1.44	91,933	NA	3,525	95,458	41,394	45,236	86,630	5,828	92,458	NA
1972/73	58,492	1.36	79,571	NA	15,590	95,161	45,241	46,620	91,861	1,300	93,161	NA
1973/74	63,155	1.62	102,051	NA	4,508	106,559	35,927	52,632	88,559	5,000	93,559	NA
1974/75	59,676	1.31	78,272	NA	2,500	80,772	38,111	49,661	87,772	4,000	91,772	NA
1975/76	61,985	1.00	61,826	NA	10,100	71,926	33,478	47,948	81,426	500	81,926	NA
1976/77	59,467	1.52	90,097	NA	4,600	94,697	33,078	52,619	85,697	1,000	86,697	NA
1977/78	62,030	1.39	86,078	NA	6,649	92,727	47,899	53,828	101,727	1,000	102,727	NA
1978/79	62,898	1.80	112,948	NA	5,142	118,090	49,626	48,964	98,590	1,500	100,090	NA
1979/80	57,682	1.45	83,760	NA	12,125	95,885	57,384	50,001	107,385	500	107,885	NA
1980/81	61,475	1.49	91,485	NA	16,000	107,485	53,085	52,900	105,985	500	106,485	NA
1981/82	59,232	1.28	75,816	NA	20,300	96,116	51,248	48,368	99,616	500	100,116	NA
1982/83	57,278	1.38	78,886	NA	20,800	99,686	47,702	47,484	95,186	500	95,686	NA
1983/84	50,800	1.42	72,241	NA	20,500	92,741	39,041	48,700	87,741	500	88,241	NA
1984/85	51,061	1.26	64,175	NA	28,100	92,275	38,507	48,268	86,775	500	87,275	NA
1985/86	50,265	1.44	72,575	NA	15,700	88,275	39,447	46,628	86,075	500	86,575	NA
1986/87	48,728	1.76	85,998	NA	16,000	101,998	49,575	46,923	96,498	500	96,998	NA
1987/88	46,683	1.66	77,321	NA	27,600	104,921	47,449	48,991	96,440	6,000	102,440	NA
1988/89	48,056	1.64	78,817	NA	21,390	100,207	46,168	48,660	94,828	6,040	100,868	NA
1989/90	47,678	1.83	87,151	NA	20,440	107,591	51,097	49,132	100,229	6,040	106,269	NA
1990/91	48,197	2.11	101,879	NA	23,189	125,068	62,283	50,443	112,726	8,540	121,266	NA
1991/92	45,925	1.57	71,981	NA	22,190	94,171	52,210	49,108	101,318	640	101,958	NA
1992/93	47,099	1.90	89,399	NA	23,685	113,084	52,266	49,024	101,290	6,600	107,890	NA
1993/94 1/	46,122	1.88	86,891	NA	15,693	102,584	46,720	48,285	95,005	7,300	102,305	NA

NA = Not available.
1/ Projected.

Appendix table 31--China's wheat: Supply and disappearance, 1960/61-1993/94

Year Beginning July 1	Supply						Disappearance					Ending stocks
	Area harvested	Yield	Pro- duction	Begin- ning stocks	Imports	Total	Domestic use			Exports	Total disap- pearance	
							Feed	Non-feed	Total			
	1,000 Ha	Mt/ha	-----1,000 metric tons-----									
1960/61	26,800	0.78	20,960	4,000	1,949	26,909	400	23,507	23,907	2	23,909	3,000
1961/62	25,572	0.56	14,250	3,000	4,893	22,143	250	20,271	20,521	122	20,643	1,500
1962/63	24,075	0.69	16,665	1,500	4,892	23,057	300	18,968	19,268	89	19,357	3,700
1963/64	23,771	0.78	18,475	3,700	5,208	27,383	500	22,570	23,070	113	23,183	4,200
1964/65	25,408	0.82	20,840	4,200	5,032	30,072	550	25,707	26,257	115	26,372	3,700
1965/66	24,709	1.02	25,220	3,700	6,282	35,202	650	30,348	30,998	4	31,002	4,200
1966/67	23,919	1.06	25,280	4,200	5,025	34,505	600	29,675	30,275	30	30,305	4,200
1967/68	25,299	1.13	28,485	4,200	4,156	36,841	600	29,028	29,628	13	29,641	7,200
1968/69	24,658	1.11	27,455	7,200	3,537	38,192	600	30,391	30,991	1	30,992	7,200
1969/70	25,162	1.08	27,285	7,200	5,125	39,610	700	32,209	32,909	1	32,910	6,700
1970/71	25,458	1.15	29,185	6,700	3,661	39,546	700	31,643	32,343	3	32,346	7,200
1971/72	25,639	1.27	32,575	7,200	2,968	42,743	700	32,838	33,538	5	33,543	9,200
1972/73	26,302	1.37	35,985	9,200	5,290	50,475	800	36,470	37,270	5	37,275	13,200
1973/74	26,439	1.33	35,225	13,200	5,645	54,070	900	40,465	41,365	5	41,370	12,700
1974/75	27,061	1.51	40,865	12,700	5,746	59,311	900	40,706	41,606	5	41,611	17,700
1975/76	27,661	1.64	45,310	17,700	2,200	65,210	950	42,560	43,510	0	43,510	21,700
1976/77	28,417	1.77	50,385	21,700	3,158	75,243	1,100	47,443	48,543	0	48,543	26,700
1977/78	28,065	1.46	41,075	26,700	8,600	76,375	1,000	50,675	51,675	0	51,675	24,700
1978/79	29,183	1.84	53,840	24,700	8,047	86,587	1,200	51,687	52,887	0	52,887	33,700
1979/80	29,357	2.14	62,730	33,700	8,865	105,295	1,500	65,095	66,595	0	66,595	38,700
1980/81	29,228	1.89	55,210	38,700	13,789	107,699	1,600	74,399	75,999	0	75,999	31,700
1981/82	28,307	2.11	59,640	31,700	13,200	104,540	1,700	77,140	78,840	0	78,840	25,700
1982/83	27,955	2.45	68,470	25,700	13,000	107,170	1,700	77,770	79,470	0	79,470	27,700
1983/84	29,050	2.80	81,390	27,700	9,600	118,690	1,800	81,190	82,990	0	82,990	35,700
1984/85	29,576	2.97	87,815	35,700	7,400	130,915	2,100	90,115	92,215	0	92,215	38,700
1985/86	29,218	2.94	85,810	38,700	6,600	131,110	2,300	98,110	100,410	0	100,410	30,700
1986/87	29,616	3.04	90,040	30,700	8,817	129,557	2,400	99,140	101,540	0	101,540	28,017
1987/88	28,798	2.98	85,840	28,017	15,327	129,184	2,500	100,340	102,840	0	102,840	26,344
1988/89	28,785	2.97	85,432	26,344	15,384	127,160	2,600	101,760	104,360	0	104,360	22,800
1989/90	29,841	3.04	90,807	22,800	12,800	126,407	2,600	101,900	104,500	0	104,500	21,907
1990/91	30,753	3.19	98,229	21,907	9,406	129,542	2,700	103,329	106,029	0	106,029	23,513
1991/92	30,948	3.10	96,000	23,513	15,823	135,336	5,000	106,000	111,000	0	111,000	24,336
1992/93	30,500	3.33	101,590	24,336	6,700	132,626	2,800	106,200	109,000	0	109,000	23,626
1993/94 1/	30,200	3.48	105,000	23,626	6,000	134,626	3,500	108,000	111,500	150	111,650	22,976

1/ Projected.

Appendix table 32--European Community wheat: Supply and disappearance, 1960/61-1993/94 1/

Year Beginning August 1	Supply						Disappearance					Ending stocks
	Area harvested	Yield	Pro- duction	Begin- ning stocks	Imports 2/	Total	Domestic use			Exports 2/	Total disap- pearance	
							Feed	Nonfeed	Total			
	1,000 ha	Mt/ha					-1,000 metric tons-					
1960/61	18,275	1.92	35,164	7,720	14,187	57,071	8,991	36,967	45,958	2,751	48,709	8,362
1961/62	17,164	1.93	33,121	8,362	14,640	56,123	8,605	36,171	44,776	3,422	48,198	7,925
1962/63	18,597	2.32	43,182	7,925	10,196	61,303	9,514	37,252	46,766	4,322	51,088	10,215
1963/64	17,465	2.09	36,572	10,215	11,206	57,993	8,935	36,509	45,444	4,414	49,858	8,135
1964/65	18,257	2.29	41,805	8,135	10,619	60,559	9,669	36,776	46,445	6,269	52,714	7,845
1965/66	18,483	2.42	44,654	7,845	11,767	64,266	10,375	37,205	47,580	6,857	54,437	9,829
1966/67	17,405	2.25	39,229	9,829	11,313	60,371	10,202	35,918	46,120	5,841	51,961	8,410
1967/68	17,254	2.68	46,220	8,410	10,577	65,207	11,378	37,448	48,826	7,368	56,194	9,013
1968/69	17,619	2.65	46,766	9,013	13,107	68,886	13,066	36,383	49,449	9,267	58,716	10,170
1969/70	17,102	2.60	44,491	10,170	13,111	67,772	15,251	35,798	51,049	10,426	61,475	6,297
1970/71	16,865	2.57	43,417	6,297	14,741	64,455	16,192	36,169	52,361	5,979	58,340	6,115
1971/72	16,976	2.99	50,819	6,115	13,298	70,232	15,671	37,036	52,707	9,165	61,872	8,360
1972/73	16,718	3.06	51,132	8,360	14,253	73,745	17,852	36,721	54,573	12,148	66,721	7,024
1973/74	16,013	3.16	50,542	7,024	13,998	71,564	14,694	35,949	50,643	11,861	62,504	9,060
1974/75	16,513	3.38	55,887	9,060	11,635	76,582	15,254	37,385	52,639	12,369	65,008	11,574
1975/76	15,192	3.15	47,822	11,574	13,410	72,806	12,074	36,643	48,717	14,587	63,304	9,502
1976/77	16,187	3.04	49,287	9,502	11,865	70,654	12,578	37,341	49,919	11,003	60,922	9,732
1977/78	14,683	3.23	47,407	9,732	14,443	71,582	12,718	38,708	51,426	12,711	64,137	7,445
1978/79	15,749	3.71	58,464	7,445	12,432	78,341	13,915	37,752	51,667	15,408	67,075	11,266
1979/80	15,519	3.63	56,288	11,266	12,790	80,344	14,691	38,025	52,716	17,904	70,620	9,724
1980/81	16,314	3.96	64,639	9,724	11,868	86,231	15,146	37,798	52,944	21,724	74,668	11,563
1981/82	16,326	3.74	61,046	11,563	12,865	85,474	15,957	37,355	53,312	22,405	75,717	9,757
1982/83	16,615	4.06	67,399	9,757	10,879	88,035	17,340	36,300	53,640	21,967	75,607	12,428
1983/84	16,812	4.01	67,339	12,428	11,700	91,467	23,346	36,719	60,065	22,432	82,497	8,970
1984/85	16,964	5.13	87,037	8,970	13,391	109,398	25,687	38,458	64,145	28,475	92,620	16,778
1985/86	16,029	4.71	75,563	16,778	15,851	108,192	26,300	37,114	63,414	27,853	91,267	16,925
1986/87	16,473	4.63	76,228	16,925	14,251	107,404	24,432	37,097	61,529	27,989	89,518	17,886
1987/88	16,630	4.54	75,486	17,886	15,286	108,658	24,763	38,193	62,956	29,272	92,228	16,430
1988/89	16,263	4.82	78,376	16,430	14,011	108,817	24,808	39,341	64,149	32,242	96,391	12,426
1989/90	16,968	4.84	82,047	12,426	14,284	108,757	23,890	37,935	61,825	33,933	95,758	12,999
1990/91	16,517	5.13	84,709	12,999	15,424	113,132	25,793	36,829	62,622	34,009	96,631	16,501
1991/92	16,875	5.36	90,422	16,501	16,145	123,068	24,559	40,023	64,582	35,708	100,290	22,778
1992/93	16,907	5.02	84,925	22,778	15,842	123,545	22,743	39,212	61,955	37,250	99,205	24,340
1993/94 3/	15,612	5.16	80,576	24,340	16,280	121,196	26,110	39,281	65,391	33,580	98,971	22,225

1/ Data include all 12 members of the European Community (including East Germany) for all years regardless of membership in a given year.

2/ Includes intra-EC trade. 3/ Projected.

Appendix table 33--Canada's wheat: Supply and disappearance, 1960/61-1993/94

Year Beginning August 1	Supply						Disappearance					
	Area harvested	Yield	Pro- duction	Begin- ning stocks	Imports	Total	Domestic use			Exports	Total disap- pearance	Ending stocks
							Feed	Nonfeed	Total			
	1,000 ha	Mt/ha	-----1,000 metric tons-----									
1960/61	9,930	1.42	14,108	16,318	0	30,426	1,695	2,561	4,256	9,614	13,870	16,556
1961/62	10,245	0.75	7,713	16,556	0	24,269	1,202	2,680	3,882	9,744	13,626	10,643
1962/63	10,852	1.42	15,392	10,643	0	26,035	1,203	2,553	3,756	9,018	12,774	13,261
1963/64	11,157	1.76	13,261	13,261	0	26,522	1,463	2,803	4,266	16,181	20,447	12,504
1964/65	12,018	1.36	16,349	12,504	0	28,853	1,276	2,740	4,016	10,875	14,891	13,962
1965/66	11,453	1.54	17,674	13,962	0	31,636	1,365	2,919	4,284	15,918	20,202	11,434
1966/67	12,016	1.87	22,516	11,434	0	33,950	1,563	2,802	4,365	14,024	18,389	15,561
1967/68	12,190	1.32	16,137	15,561	0	31,698	1,461	2,789	4,250	9,145	13,395	18,303
1968/69	11,908	1.49	17,689	18,303	0	35,992	1,747	2,739	4,486	8,323	12,809	23,183
1969/70	10,102	1.81	18,267	23,183	0	41,450	2,308	2,260	4,568	9,430	13,998	27,452
1970/71	5,052	1.79	9,024	27,452	0	36,476	2,156	2,494	4,650	11,846	16,496	19,980
1971/72	7,854	1.83	14,412	19,980	0	34,392	2,209	2,586	4,795	13,710	18,505	15,887
1972/73	8,640	1.68	14,514	15,887	0	30,401	2,061	2,703	4,764	15,692	20,456	9,945
1973/74	9,575	1.69	16,159	9,945	0	26,104	1,918	2,683	4,601	11,414	16,015	10,089
1974/75	8,935	1.49	13,295	10,089	0	23,384	1,699	2,908	4,607	10,739	15,346	8,038
1975/76	9,479	1.80	17,078	8,038	0	25,116	1,815	2,826	4,641	12,253	16,894	8,222
1976/77	11,252	2.10	23,587	8,222	0	31,809	1,750	3,295	5,045	13,446	18,491	13,318
1977/78	10,118	1.96	19,862	13,318	0	33,180	1,487	3,581	5,068	15,997	21,065	12,115
1978/79	10,584	2.00	21,145	12,115	0	33,260	2,439	2,851	5,290	13,061	18,351	14,909
1979/80	10,489	1.64	17,185	14,909	0	32,094	2,537	2,953	5,490	15,883	21,373	10,721
1980/81	11,098	1.74	19,291	10,721	0	30,012	2,175	3,065	5,240	16,262	21,502	8,510
1981/82	12,427	2.00	24,802	8,510	0	33,312	2,002	3,150	5,152	18,447	23,599	9,713
1982/83	12,554	2.13	26,715	9,713	0	36,428	1,815	3,272	5,087	21,368	26,455	9,973
1983/84	13,697	1.93	26,465	9,973	0	36,438	2,246	3,237	5,483	21,765	27,248	9,190
1984/85	13,158	1.61	21,188	9,190	2	30,380	1,982	3,257	5,239	17,543	22,782	7,598
1985/86	13,729	1.77	24,252	7,598	14	31,864	2,060	3,538	5,598	17,697	23,295	8,569
1986/87	14,229	2.20	31,359	8,569	1	39,929	2,838	3,577	6,415	20,783	27,198	12,731
1987/88	13,458	1.93	25,945	12,731	4	38,680	4,438	3,419	7,857	23,518	31,375	7,305
1988/89	12,944	1.23	15,913	7,305	9	23,227	2,260	3,506	5,766	12,429	18,195	5,032
1989/90	13,718	1.81	24,796	5,032	1	29,829	2,164	4,338	6,502	16,885	23,387	6,442
1990/91	14,098	2.28	32,098	6,442	0	38,540	2,919	3,605	6,524	21,731	28,255	10,285
1991/92	14,160	2.26	31,946	10,285	22	42,253	4,170	3,536	7,706	24,481	32,187	10,066
1992/93	13,830	2.16	29,871	10,066	30	39,967	4,540	3,484	8,024	19,709	27,733	12,234
1993/94 1/	12,600	2.21	27,800	12,234	20	40,054	5,238	3,682	8,920	18,500	27,420	12,634

1/ Projected.

Appendix table 34--Australia's wheat: Supply and disappearance, 1960/61-1993/94

Year Beginning October 1	Supply						Disappearance					Ending stocks
	Area harvested	Yield	Pro- duction	Begin- ning stocks	Imports	Total	Domestic use			Exports	Total disap- pearance	
							Feed	Nonfeed	Total			
	1,000 ha	Mt/ha					1,000 metric tons					
1960/61	5,439	1.37	7,450	1,977	0	9,427	588	1,394	1,982	6,456	8,438	989
1961/62	5,958	1.13	6,727	1,989	0	7,716	474	1,485	1,959	4,950	6,909	807
1962/63	6,665	1.25	8,353	807	0	9,160	405	1,648	2,053	6,148	8,201	959
1963/64	6,668	1.34	8,925	959	0	9,884	419	1,599	2,018	6,986	9,004	880
1964/65	7,252	1.38	10,037	880	0	10,917	944	1,663	2,607	7,321	9,928	989
1965/66	7,088	1.00	7,067	989	0	8,056	721	1,870	2,591	4,691	7,282	774
1966/67	8,427	1.51	12,699	774	0	13,473	601	1,859	2,460	8,497	10,957	2,516
1967/68	9,082	0.83	7,547	2,516	0	10,063	762	1,910	2,672	5,654	8,326	1,737
1968/69	10,846	1.36	14,804	1,737	0	16,541	449	2,135	2,584	6,371	8,955	7,586
1969/70	9,486	1.11	10,546	7,586	0	18,132	740	1,800	2,540	8,047	10,587	7,545
1970/71	6,479	1.22	7,890	7,545	0	15,435	653	1,972	2,625	9,145	11,770	3,665
1971/72	7,138	1.21	8,606	3,665	0	12,271	822	2,077	2,899	7,788	10,687	1,584
1972/73	7,604	0.87	6,590	1,584	0	8,174	1,239	2,089	3,328	4,281	7,609	565
1973/74	8,948	1.34	11,987	565	0	12,552	1,226	2,313	3,539	7,031	10,570	1,982
1974/75	8,308	1.37	11,357	1,982	0	13,339	1,000	2,119	3,119	8,562	11,681	1,658
1975/76	8,555	1.40	11,982	1,658	0	13,640	1,350	962	2,312	8,663	10,975	2,665
1976/77	8,956	1.32	11,800	2,665	0	14,465	1,250	1,593	2,843	9,485	12,328	2,137
1977/78	9,955	0.94	9,370	2,137	0	11,507	1,280	1,349	2,629	8,098	10,727	780
1978/79	10,249	1.77	18,090	780	0	18,870	1,250	1,281	2,531	11,693	14,224	4,646
1979/80	11,153	1.45	16,188	4,646	0	20,834	1,928	1,441	3,369	13,197	16,566	4,268
1980/81	11,283	0.96	10,856	4,268	0	15,124	2,014	1,489	3,503	9,577	13,080	2,044
1981/82	11,885	1.38	16,360	2,044	0	18,404	1,419	1,201	2,620	11,008	13,628	4,776
1982/83	11,520	0.77	8,876	4,776	0	13,652	2,441	885	3,326	8,041	11,367	2,285
1983/84	12,931	1.70	22,016	2,285	0	24,301	1,258	1,885	3,143	13,640	16,783	7,518
1984/85	12,078	1.55	18,666	7,518	0	26,184	1,400	2,168	3,568	14,032	17,600	8,584
1985/86	11,736	1.38	16,167	8,584	0	24,751	1,350	1,514	2,864	16,022	18,886	5,865
1986/87	11,135	1.45	16,119	5,865	0	21,984	1,500	1,150	2,650	15,562	18,212	3,772
1987/88	9,063	1.36	12,369	3,772	0	16,141	1,865	1,676	3,541	9,850	13,391	2,750
1988/89	8,903	1.58	14,060	2,750	0	16,810	950	1,965	2,915	11,295	14,210	2,600
1989/90	9,004	1.58	14,214	2,600	0	16,814	1,000	2,012	3,012	10,767	13,779	3,035
1990/91	9,218	1.63	15,066	3,035	0	18,101	1,500	2,018	3,518	11,760	15,278	2,823
1991/92	7,183	1.47	10,557	2,823	0	13,380	1,366	2,041	3,407	7,103	10,510	2,870
1992/93	9,101	1.78	16,184	2,870	0	19,054	1,500	2,000	3,500	9,853	13,353	5,701
1993/94 1/	9,500	1.89	18,000	5,701	0	23,701	1,500	2,200	3,700	12,500	16,200	7,501

1/ Projected.

Appendix table 35--Argentina's wheat: Supply and disappearance, 1960/61-1993/94

Year Beginning December 1	Supply						Disappearance					Ending stocks
	Area harvested	Yield	Pro- duction	Begin- ning stocks	Imports	Total	Domestic use			Exports	Total disap- pearance	
							Feed	Nonfeed	Total			
	1,000 ha	Mt/ha	-----1,000 metric tons-----									
1960/61	3,599	1.10	3,960	1,192	0	5,152	135	3,159	3,294	1,094	4,388	764
1961/62	4,421	1.29	5,725	764	0	6,489	134	3,395	3,529	2,717	6,246	243
1962/63	3,745	1.52	5,700	243	0	5,943	138	3,505	3,643	1,796	5,439	504
1963/64	5,676	1.58	8,940	504	0	9,444	143	3,628	3,771	3,460	7,231	2,213
1964/65	6,135	1.84	11,260	2,213	0	13,473	146	3,700	3,846	6,287	10,133	3,340
1965/66	4,601	1.32	6,079	3,340	0	9,419	139	3,519	3,658	5,586	9,244	175
1966/67	5,214	1.20	6,247	175	134	6,556	155	3,923	4,078	2,233	6,311	245
1967/68	5,812	1.26	7,320	245	35	7,600	167	4,226	4,393	2,199	6,592	1,008
1968/69	5,837	0.98	5,740	1,008	390	7,138	144	3,650	3,794	2,494	6,288	850
1969/70	5,191	1.35	7,020	850	0	7,870	181	4,587	4,768	2,322	7,090	780
1970/71	3,701	1.33	4,920	780	0	5,700	31	4,025	4,056	969	5,025	675
1971/72	4,315	1.32	5,680	675	0	6,355	29	4,327	4,356	1,629	5,985	370
1972/73	4,965	1.39	6,900	370	493	7,763	54	4,247	4,301	3,193	7,494	269
1973/74	3,958	1.66	6,560	269	0	6,829	50	4,171	4,221	1,582	5,803	1,026
1974/75	4,233	1.41	5,970	1,026	0	6,996	189	4,309	4,498	1,784	6,282	714
1975/76	5,270	1.63	8,570	714	0	9,284	982	4,398	5,380	3,162	8,542	742
1976/77	6,428	1.71	11,000	742	0	11,742	542	3,700	4,242	5,900	10,142	1,600
1977/78	3,910	1.46	5,700	1,600	0	7,300	200	4,149	4,349	1,775	6,124	1,176
1978/79	4,685	1.73	8,100	1,176	0	9,276	100	3,993	4,093	4,080	8,173	1,103
1979/80	4,787	1.69	8,100	1,103	0	9,203	200	3,820	4,020	4,755	8,775	428
1980/81	5,023	1.55	7,780	428	0	8,208	150	3,800	3,950	3,845	7,795	413
1981/82	5,926	1.40	8,300	413	0	8,713	150	4,150	4,300	3,638	7,938	775
1982/83	7,320	2.05	15,000	775	0	15,775	200	4,649	4,849	9,870	14,719	1,056
1983/84	6,880	1.85	12,750	1,056	0	13,806	150	4,550	4,700	7,847	12,547	1,259
1984/85	5,950	2.22	13,200	1,259	0	14,459	75	4,525	4,600	9,408	14,008	451
1985/86	5,270	1.61	8,500	451	0	8,951	75	4,325	4,400	4,300	8,700	251
1986/87	4,982	1.79	8,930	251	0	9,181	0	4,526	4,526	4,435	8,961	220
1987/88	4,789	1.84	8,800	220	0	9,020	100	4,400	4,500	3,705	8,205	815
1988/89	4,700	1.79	8,400	815	0	9,215	100	4,600	4,700	4,034	8,734	481
1989/90	5,450	1.86	10,150	481	0	10,631	100	4,440	4,540	6,060	10,600	31
1990/91	5,700	1.91	10,900	31	0	10,931	200	4,317	4,517	5,592	10,109	822
1991/92	4,550	2.17	9,880	822	0	10,702	50	4,527	4,577	5,780	10,357	345
1992/93	4,400	2.20	9,700	345	0	10,045	50	4,100	4,150	5,850	10,000	45
1993/94 1/	4,800	1.98	9,500	45	0	9,545	50	4,450	4,500	5,000	9,500	45

1/ Projected.

