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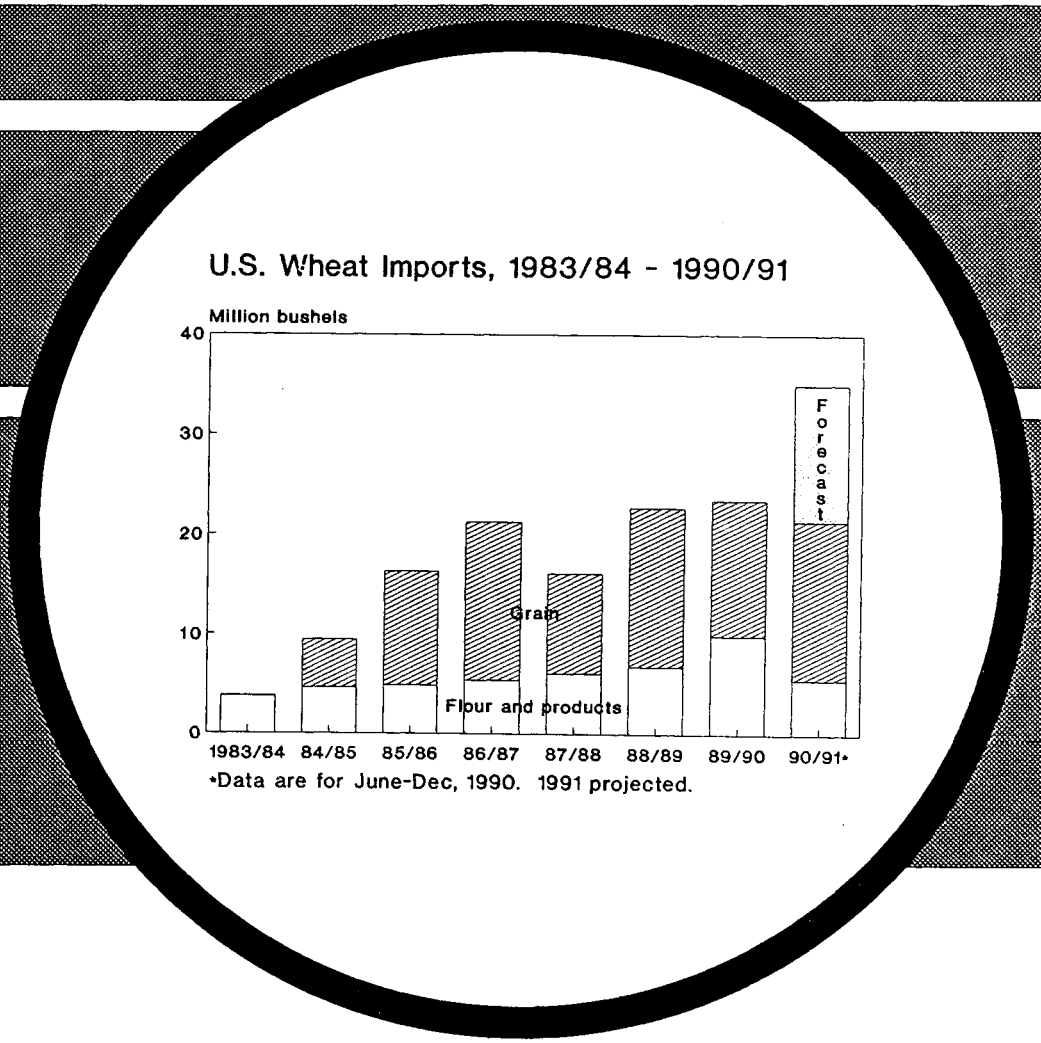
Wheat

Situation and Outlook Yearbook



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Summary

U.S. Wheat Area Down

U.S. wheat farmers are responding to the higher acreage reduction program new flexibility provisions, and low wheat prices by reducing production in 1991. Wheat area planted for 1991 is estimated down 11 percent, based on the 10-percent reduction reported for winter wheat and a 13-percent drop in spring wheat planting intentions indicated in a special survey of planting intentions. Spring wheat producers are reducing acreage more than winter wheat producers because they face different incentives, especially regarding the new flexibility provisions of the 1990 farm bill.

The decline in 1991 production is likely to be greater than the drop in intended plantings because producers will harvest a smaller portion of their planted acres than last year and wheat yields will be hard pressed to match last year's record. Despite the lower expected production, beginning stocks are forecast up 446 million bushels to nearly 1 billion, leaving the United States with large supplies.

Foreign wheat production is likely to decline in 1991/92 as area drops in most of the major exporting countries and possibly in some of the major importing countries. In addition, foreign wheat yields will be hard pressed to match the 1990/91 record. A sharp reduction in foreign production would lead to an expansion in world trade and U.S. market share. However, only a small reduction in foreign output would mean another year of intense competition for world wheat markets because of the relatively large stocks expected to be carried over from 1990/91.

World wheat production in 1990/91 is a record 589 million tons, outstripping consumption by 5 percent and contributing to the largest increase in stock volume since 1982/83. Despite the lowest export prices in many years, large supplies in importing countries will lead to the lowest world trade since 1986/87. With competitor supplies also up, the U.S. market share is forecast to tumble to its smallest since 1985/86.

The large jump in U.S. wheat supply continues to outstrip demand, disrupting normal seasonal patterns and/or expectations. Prices have not shown their normal seasonal increase. Imports and food use have been larger than expected. Feed and residual use was record large in the first quarter of the marketing year but less than many expected in the second quarter.

THE WHEAT SITUATION AT A GLANCE

All wheat: Supply and disappearance 1/

Year beginning June 1	1986	1987	1988	1989 Estimated	1990 Projected
			Million bushels		
Beginning stocks	1,905	1,821	1,261	702	536
Production	2,091	2,108	1,812	2,037	2,739
Imports	21	16	23	23	35
Supply, total	4,017	3,945	3,096	2,762	3,310
Domestic					
Food	712	721	715	731	765
Seed	84	85	103	101	88
Feed and residual	401	280	157	160	450
Domestic, total	1,197	1,086	975	992	1,303
Exports	999	1,598	1,419	1,233	1,025
Disappear., total	2,196	2,684	2,394	2,225	2,328
Ending stocks	1,821	1,261	702	536	982

Wheat by classes: Supply and disappearance 1/

Year beginning June 1	Hard red winter	Hard red spring	Soft red winter	White	Durum	Total
1989/90 (Estimated)			Million bushels			
Beginning stocks	302	219	39	81	60	702
Production	711	433	549	251	92	2,037
Supply, total 2/	1,013	660	588	335	165	2,762
Domestic disappear.	438	225	212	57	60	992
Exports	360	280	345	193	55	1,233
Disappear., total	798	505	557	250	115	2,225
Ending stocks	215	155	32	85	50	536
1990/91 (Projected)						
Beginning stocks	215	155	32	85	50	536
Production	1,199	555	549	313	122	2,739
Supply, total 2/	1,414	722	581	407	186	3,310
Domestic disappear.	610	264	280	89	60	1,303
Exports	335	200	225	215	50	1,025
Disappear., total	945	464	505	304	110	2,328
Ending stocks	469	258	76	103	76	982

1/ Includes flour and products in wheat equivalent. 2/ Total supply includes imports.

Outlook for 1991/92

U.S. Wheat Area Drops 11 Percent

The decline in 1991 production is likely to be greater than the drop in intended plantings because producers will harvest a smaller portion of their planted acres than last year and wheat yields will be hard pressed to match last year's record. Despite the lower expected production, beginning stocks are forecast up 446 million bushels to nearly 1 billion, leaving the United States with large supplies.

Last fall, farmers seeded[1] 10 percent less winter wheat than a year earlier, and spring wheat producers' early intentions show a 13-percent drop in plantings.

U.S. wheat farmers are responding to the higher acreage reduction program (ARP), new flexibility provisions, and 1990's low wheat prices by reducing production in 1991. However, beginning stocks are forecast up 446 million bushels to nearly 1 billion, leaving the U.S. with large supplies, despite lower expected production. If the rest of the world also shows a sharp reduction in wheat production, world trade and U.S. exports are likely to expand in 1991/92. However, if the drop in foreign output is relatively small, the large stocks forecast to be carried over from 1990/91 will mean continued large foreign supplies and U.S. exporters could face another year of intense competition for world markets.

Spring Wheat Area Prospects Are Down

A special survey conducted during the last 2 weeks of January indicated that farmers plan to plant 13 percent less area to spring wheat in 1991. Durum area intentions were up 1 percent, but other spring wheat intentions dropped 16 percent. Spring wheat producers are reducing wheat acreage more than winter wheat producers because they face different incentives, especially with respect to the new flexibility provisions of the 1990 farm bill. A large portion of the decline in winter and spring acreage is in response to 1991's higher ARP — 15 percent versus 1990's 5 percent (which was later modified to allow planting of up to 105 percent of base).

Wheat prices continued to decline into January, leaving spring wheat producers even less optimistic about prices than winter wheat farmers were last fall. The low prices will encourage some spring wheat farmers to plant other crops on their flex acres.

In the Northern Plains, a significant portion of wheat producers have grown sunflowers, other oilseeds, or barley and are likely to find them an attractive alternative in 1991. Oilseed prices will be supported by a marketing loan program.

After several years of drought in the Northern Plains, the value of fallow land in a crop rotation likely has become clearer to many farmers. The increased ARP will allow more land to lie fallow. Additionally, some farmers may fallow flex acres, conserving scarce soil moisture until wheat prices are more attractive. The new conservation programs also may attract some spring wheat base.

If wheat prices stay low through the spring while oilseed prices strengthen, some spring wheat producers may put their entire wheat base into the 0/92 program and grow minor oilseeds on all their permitted acres. This option would allow them to receive 92 percent of the deficiency payments they could have received if they had planted wheat, while planting minor oilseeds on their permitted acres. However, the producer must forgo either the wheat deficiency payment or the oilseed marketing loan program.

Durum Intentions May Be Self-Defeating Prophesy

The planting intentions survey taken in late January showed that farmers intended to increase durum area. January's mid-month average farm price in North Dakota pegged durum $0.35 per bushel above other spring wheat. This is more than a 15-percent price premium, providing ample incentive for switching from hard red spring wheat (HRS) to durum. Moreover, with the general outlook indicating low wheat prices, the possibility that durum prices might move somewhat independently makes durum attractive.

But the price premium between durum and HRS is volatile. As recently as August 1990 durum had no premium to HRS in North Dakota, and, throughout most of 1989/90, durum actually sold at a discount to other spring wheat. Over the last decade durum has commanded a price premium only 55-60 percent of the time.

The U.S. durum market is comparatively small and is largely dominated by North Dakota's production. Beginning stocks for 1991/92 are forecast at 76 million bushels, up over 50 percent from the year before. Any production increase in 1991 could contribute to sharply higher supply and lower prices. Hearing that their neighbors plan to increase durum area, many farmers who thought they would plant durum, may take a look at the durum supply and demand balance and change their minds. The NASS report on planting intentions states, "Actual 1991 plantings may vary from these reported intentions because of ... indications from this report...."

[1] Winter wheat seedings were reported in USDA's *Winter Wheat and Rye Seedings* report released on January 11, 1991, and spring planting intentions were reported in a special planting intentions report released February 11. The special planting intentions was done earlier and had a smaller sample size than the March *Prospective Plantings.)*

Harvested Area Is Loosely Linked to Planted Area

In 1990, winter wheat producers harvested 88 percent of their planted area, up from 75 percent the year before and the highest since the early 1980's. In 1991, the percentage of planted area that is harvested probably will drop for a number of reasons.

In the Southern Plains states, the 1991 winter wheat plantings decreased only modestly or even increased. But many of the farmers there traditionally plant all of their wheat base but harvest a much smaller percentage of the planted acres than in other states. Farmers can then choose the portion that they feel has the highest yield prospects to be harvested.

The planted wheat may not be harvested for a number of reasons. Some of the planted wheat is never meant to be harvested for grain, but is used as pasture (grazed out) and/or cut for hay. Some is only used as temporary pasture until it reaches a certain stage of maturity, the cattle are then pulled off and the wheat is used for the production of grain. Another portion of the wheat is grazed out, clipped, disked up, or whatever is needed to meet the ARP and/or 0/92 conserving use requirements. Low ARPs, strong wheat prices and favorable weather conditions during the growing season all point to more of the planted area being harvested. Such was the case last year in the Southern Plains when an unusually large portion of the planted wheat was harvested for grain.

Because the ARP requirement has increased from 1990's 5 percent to 15 percent in 1991, more of the planted area will have to be idled instead of harvested for grain. Also, farmers this year do not have the option of modifying their contracts to harvest up to 105 percent of their base as they did in 1990. In addition, cattle prices are strong and wheat prices are low. These factors suggest a much smaller portion of the crop being harvested for grain.

An additional factor has entered the picture this year — namely the new farm bill flexibility provisions. Winter wheat producers can elect to forego deficiency payments on flex acres. In return they will likely receive a higher deficiency payment on their payment acres and they are allowed to plant a spring crop, such as sorghum or cotton, on their flexible acres. The early intentions report showed a whopping 19-percent increase in sorghum area and 18 percent more cotton (see example in Wheat by Class section).

If yield prospects are good, most winter wheat farmers will find it profitable to harvest a maximum of 85 percent of their base and receive deficiency payments based on a slightly lower payment rate.

In soft red winter wheat (SRW) regions, producers normally harvest a higher percentage of planted area than elsewhere. However, ERS estimates based on the winter wheat seedings report indicate 1991 SRW planted area dropped almost 20 percent last fall. Program participation is lower in many soft red producing states, and when prices fall, the nonparticipants do not have increased deficiency payments to keep them from switching to an alternative crop.

Yield Prospects Are Tempered

In 1990, wheat producers posted record average yields. And while a new record is always a possibility in 1991, it is not the most likely outcome. Through early February, there have been reports of some winterkill in the Pacific Northwest and in some soft red winter areas, but growing conditions have been generally favorable in the Southern Plains.

Normally, an increase in the ARP sets the stage for increased yields as each farmer takes his lowest yielding land out of production. However, in 1991 this likely will be offset by regional shifts in planted area.

Yields in soft red winter areas average almost 10 bushels per acre higher than in hard red winter areas. With area planted to soft red winter estimated down almost 20 percent, and hard red winter plantings down only 8 percent, a larger proportion of the winter wheat crop will be in lower yielding varieties.

1991/1992 Wheat Program Provisions

Special Winter Wheat Option Available

Winter wheat producers, who planted in 1990 — before the 1991 wheat program provisions were announced on December 31, 1990 — have the option of receiving deficiency payments on 85 percent of wheat base if they accept deficiency payments based on a 12-month-average price instead of the normal 5-month-average price. Historically the 12-month price has been 7-11 cents higher than the 5-month price. The farm bill sets a maximum reduction of 10 cents per bushel.

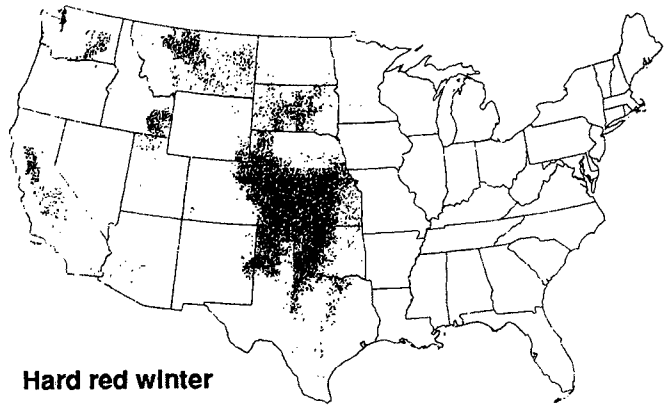
Wheat producers not electing or not eligible for the winter wheat option, on the other hand, can only receive deficiency payments on a maximum of 70 percent of their base acreage. The ARP accounts for 15 percent. Another 15 percent of their base is called "normal flexible acres" and is not eligible for deficiency payments, but this land may be planted to any program crop or oilseed without losing base history.

The maximum payment acreage will be 85 percent of the wheat acreage base for producers in the winter wheat option (the other 15 percent is ARP). The maximum payment acreage for wheat producers not in the winter wheat option will be 70 percent of base (100 percent less the 15 percent ARP, less the 15 percent normal flex acres). Producers exercising the winter wheat option cannot plant wheat on the flexible acres of other crop bases.

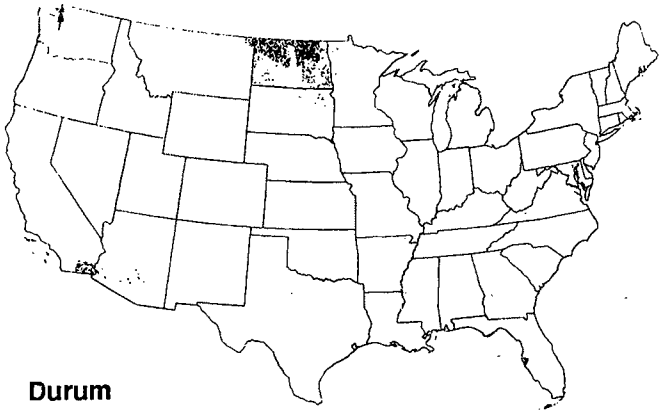
For the 1991 crop, program provisions for wheat include the following:

- The price support level (loan rate) is $2.04 per bushel. The basic loan level is $2.52.
- The target price is $4.00 per bushel.
- The acreage reduction program (ARP) is 15 percent.
- The projected deficiency payment rate is $1.40 per bushel for the winter wheat option, and $1.47 for other wheat producers.
- The advance deficiency payment rate is equal to 40 percent of the estimated deficiency payment rate. Advance payments will be made in cash.
- Producers may plant crops other than wheat on up to 25 percent of wheat program crop acreage base. This acreage will be known as "flexible" acreage.
- Fruits, vegetables, and any crop prohibited by the secretary may not be grown on flex acres.
- 0/92 provisions allow the producer to devote a portion or all of the maximum payment acreage to conservation uses or certain minor oilseeds and be eligible for guaranteed deficiency payments on an acreage equal to the maximum payment acreage on the farm, less 8 percent, less any acreage actually planted to wheat.
- If producers choose to plant a minor oilseed (sunflowerseed, rapeseed, canola,safflowerseed, flaxseed and mustard seed) on 0/92 acreage they must agree to forgo either (1) wheat deficiency payments on the acreage planted to oilseeds,or (2) marketing-loan eligibility for the entire farm for any oilseed planted on 0/92 acres.
- Program payment yields remain unchanged from 1991.

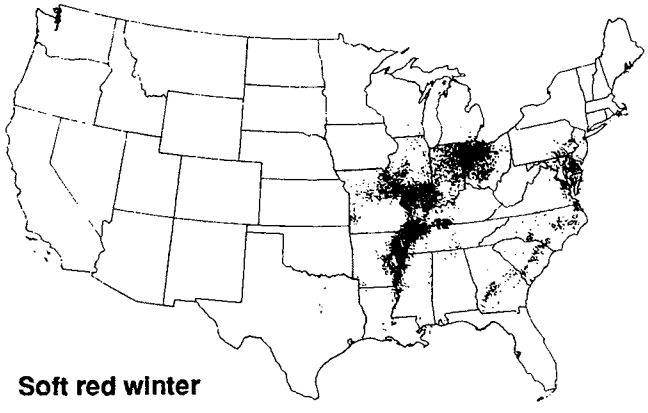
Distribution of the five U.S. market classes of wheat



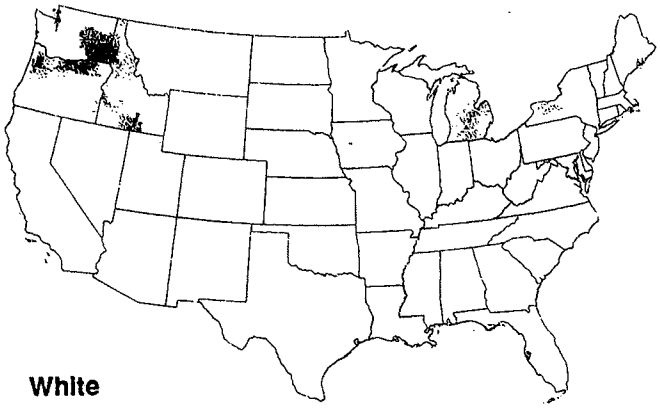
Hard red winter



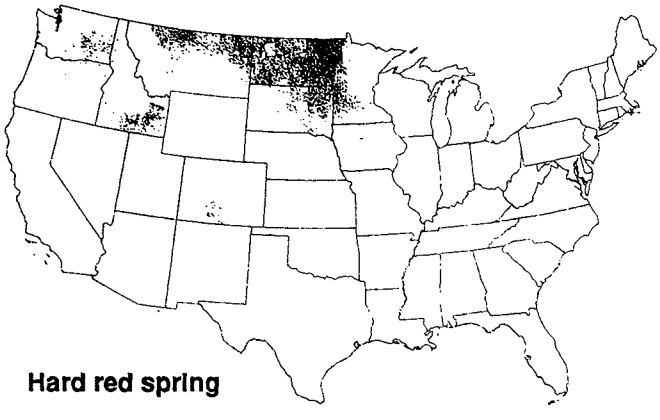
Durum



Soft red winter



White



Hard red spring

1 Dot = 5,000 acres.
Source (9).

Foreign Wheat Production Is Likely To Decline in 1991/92

Low wheat prices and other economic factors are likely to lead to a decline in wheat area in several countries, especially those that export wheat. Winter wheat in the Northern Hemisphere has already been planted and is generally in good condition.

While USDA will not publish its first forecast of 1991/92 wheat production until May, economic conditions do not look favorable for wheat producers in many countries.

Last year, relatively high prices at planting and favorable weather in many major producing countries contributed to area increases and record or near-record yields. Assuming normal weather for the 1991/92 crop, yields are likely to be lower. In addition, area in several major producing countries likely will be down because of 1990/91's low wheat prices.

Winter wheat crops in the Northern Hemisphere generally appear to be in good condition. Winter grains area is likely to be down in the Soviet Union partially because wet weather in the autumn delayed planting there. The winter was mild through January in most of the Soviet Union's winter wheat areas.

In China, the government is encouraging producers to plant more area to wheat, but the lack of adequate incentives might lead to a decline in spring wheat area. Although the government has indicated that greater area has been planted to winter wheat, the mild winter is already resulting in scattered pest and disease outbreaks which could intensify in the spring and reduce yields.

In South Asia, favorable weather and adequate supplies of irrigation water are assisting the winter wheat crop. While it was very dry at planting in several countries, mild winter conditions are now benefitting the East European crop.

European Community (EC) producers are largely protected from oscillationsin world export prices by high support prices. Support prices are automatically reduced from basic support levels when the previous year's production of total grain exceeds 160 million tons, known as the Minimum Guaranteed Quantity (MGQ). USDA has estimated that total 1990/91 EC grain production is below 160 million tons. If the official EC estimate is also under the MGQ, EC grain farmers will not face additional cuts from the basic support levels in 1991/92 under the automatic stabilizer system.

Last fall, when the winter wheat crop, which comprises 95 percent of EC wheat production, was planted, the 1990/91 oilseed subsidies had already been cut because the various oilseed crops had all exceeded their allocated MGQ's. So the wheat price improved, relative to oilseeds (common substitute crops for wheat). As a result, wheat area is expected to rise, particularly in France. ONIC (Office National Interprofessionnel des Cereales) has forecast a 2.7-percent increase in France's soft wheat area and a 10.4-percent jump in its durum area.

The same incentives to substitute wheat for oilseeds also exist in the EC's other major wheat producing countries. However, while wheat area is expected to rise, a return to trend yields would bring production below 1990/91 when many EC countries achieved record and near-record yields. But there are reports that a larger percentage of winter wheat area was planted to higher yielding varieties which could lead to another large crop.

Spring wheat planting in Canada will not begin until April-May. However, Agriculture Canada is already forecasting a steep wheat area decline (8.5 percent) due to low wheat prices. The lower area and average yields (instead of last year's record) would result in a 25-percent drop in production.

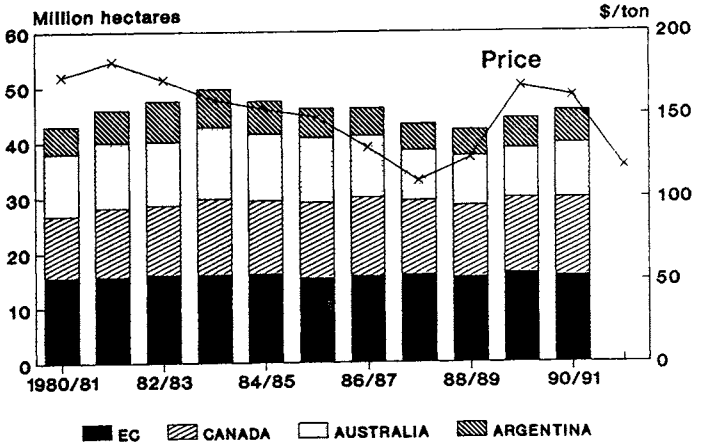
Low prices might also discourage Australian growers. The Australian Wheat Board is forecasting a sharp drop in production from 15.7 million tons. However, it is possible that the decline might not be quite that severe. Wool and sheep meat prices are also very low, leaving few profitable alternatives to wheat. Some area might shift to barley; other area might remain fallow. However, for many producers, wheat will remain the best option in 1991/92, despite low returns.

In Argentina, farmers are once again faced with economic uncertainty prior to planting. Until late January, Argentina's appreciating currency made its wheat less attractive to buyers and low farm prices reduced farm returns. At the same time, the decline in inflation allowed producers to contain costs. Since January, the value of the austral has fallen, inflation is once again spiralling upward, and there are reports that the government is considering reinstituting export taxes on wheat after it eliminated them last November.

Argentina's wheat farmers will not be planting their crop until May-June. Low world prices and domestic inflation provide farmers with incentives to cut back area planted to wheat. If export taxes were to be reimposed, farmers would have further reason to reduce area.

Figure 1

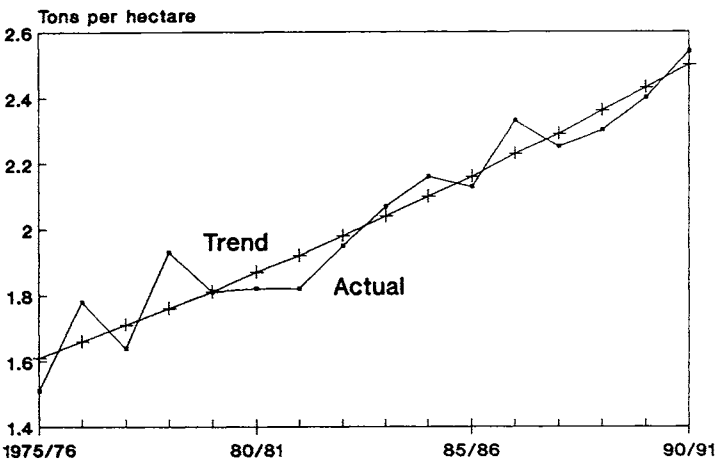
Competitor Wheat Area and Export Prices



Export price is U.S. f.o.b. Gulf, HRW No. 2.
Annual average (July/June), lagged one year.

Figure 2

Foreign Wheat Yields



1990/91 forecast

World Wheat Production in 1990/91 Is Record High

World wheat production in 1990/91 is estimated at a record 589 million tons, outstripping consumption by 5 percent and contributing to the largest increase in stock volume since 1982/83.

Foreign production is estimated at a record 515 million tons, up 7 percent from 1989/90, and consumption is forecast to rise 4 percent to 527 million, mostly due to an increase in feeding. Thus, stocks are forecast to expand 13 percent,with most of the rise in the major foreign exporters. The largest production increases occurred in the Soviet Union, Canada, and China.

Most countries in the Southern Hemisphere completed harvesting their 1990/91 wheat crops recently. While Australia produced its largest crop since 1986/87, other countries, including Argentina, Brazil, and South Africa experienced disappointing harvests.

Australia is estimated to have harvested 15.7 million tons, 11 percent above 1989/90. Strong production in Western Australia more than offset the low yields which resulted from dry weather in southern growing areas.

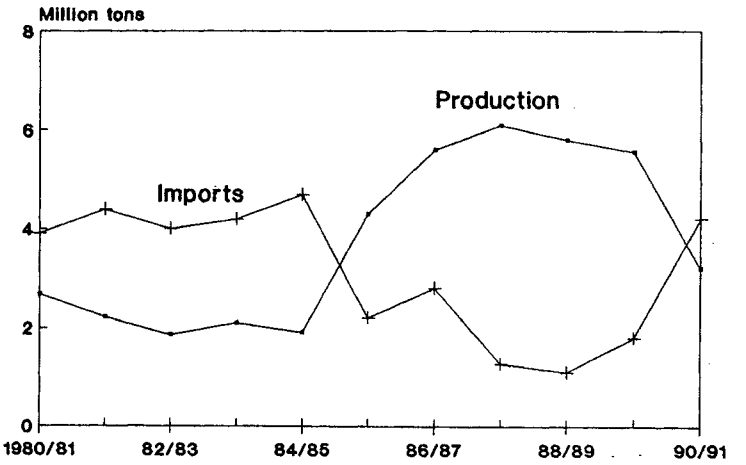
In Argentina, dry weather early in the season and frost during the heading period reduced yields below expectations. However, an 8-percent increase in area helped total production to rise to an estimated 11.2 million tons, 10 percent above a year earlier.

Brazil's wheat crop suffered serious yield damage due to frost during the reproduction and head filling phase. Area was already down and input use was probably reduced because economic austerity measures made it difficult for farmers to obtain adequate credit prior to planting. Total 1990/91 production, estimated at 3.2 million tons, would only equal 58 percent of the 1989/90 crop.

South Africa's crop suffered from serious drought for the second consecutive year. Yields fell 3 percent below those of 1989/90 and 21 percent below the 5-year average (1985/86-1989/90).

Figure 3

Brazil: Wheat Production and Imports



1990/91 forecast.

World Trade Contracting in 1990/91

Despite the lowest prices in many years, large supplies in importing countries will lead to the lowest world trade since 1986/87.

Large crops in importing and exporting countries have led to a contraction in imports and heightened competition for the smaller world market. World trade is forecast at 93.9 million tons, 2 percent below 1989/90.

The Soviet Union is forecast to import 13 million tons in 1990/91, down 7 percent from 1989/90. The decline is prompted by the USSR's large wheat crop (the third highest on record) and its tight foreign exchange situation. Nearly all the wheat imported through January has been bought with credit.

During the autumn, Canada, France, and Australia offered the USSR a total of $1.6 billion to buy grain, mostly wheat. In December, the United States offered the USSR a GSM-102 credit line of $1 billion to buy grain and other agricultural products. The original allocation included $530 million for feed grains, $165 million for wheat and flour, $130 million for protein meal, up to $50 million for freight, and $100 million remained unallocated. On February 15, $67 million of the unallocated funds were allocated for soybeans ($58 million) and almonds ($9 million). The $1 billion represents 20 percent of the total GSM-102 program funding for the 1991 fiscal year. The Soviet Union has up to 3 years to repay the loan. In February, France offered an additional $200 million in credit.

By the second week in January, the USSR had bought 4.7 million tons of coarse grains with GSM credit, exhausting the feed grain allocation. Then, the USSR began bidding for hard red winter wheat (HRW) and feed-quality soft red winter wheat (SRW) under the Export Enhancement Program (EEP). All bids for SRW were rejected and, as of February 15, the USSR had bought 1.5 million tons of HRW.

The USSR also continued negotiating for additional wheat imports from the EC, Canada, and Australia. However, because Argentina is not offering any credit to the Soviets, analysts do not expect the USSR to buy wheat from Argentina.

China's wheat imports are forecast down 19 percent from 1989/90 to 10.5 million tons, the lowest since 1986/87. Record wheat and rice crops have led to large surpluses. In 1987/88 China took advantage of low world prices to boost consumption and maintain wheat stocks. This year, there appears to be serious problems in finding adequate storage facilities for the domestic grain crops. China's grain imports are being further hampered by its tight foreign exchange situation.

Wheat imports continue to pour into North Africa. Algeria and Morocco in particular appear to be taking advantage of credit offers and low prices to import large amounts of wheat. However, Egypt might import less wheat in 1990/91 if delays in the signing of its P.L. 480 agreement with the United States push purchases into the 1991/92 marketing year.

Imports by Middle Eastern countries are forecast down 38 percent from 1989/90 because of the embargo on Iraq and Turkey's improved supply situation as it recovered from the 1989 drought. However, wheat imports are increasing in some markets, particularly in Jordan and North Yemen.

South Asian imports are forecast down. While the wheat crop in most South Asian countries will fall short of 1989/90, their rice crops are expected to exceed the 1989/90 record, reducing food grain import requirements. While Bangladesh is still expected to increase wheat imports more than 20 percent to 1.5 million tons, Pakistan's imports are forecast down 50 percent to 1 million tons. India is forecast to export 600,000 tons of wheat, mostly to Jordan, the USSR, and Afghanistan. In 1989/90, India exported only 20,000 tons of wheat.

East Asian imports are forecast up 25 percent almost entirely because of the increase in South Korea's imports of wheat for feeding. South Korea is expected to import over 2 million tons of wheat for feed from the EC, Canada, and Australia. High wheat prices relative to coarse grains kept South Korea from importing wheat for feed in 1989/90.

Latin American imports are forecast up 41 percent from 1989/90, mostly because of a 150-percent increase in Brazil's imports. Brazil's imports are forecast at 3.7 million tons, partially offsetting this year's steep production decline. Bread remains one of the country's cheapest sources of calories, so consumption is likely to remain strong.

Competition Stiffens for the Smaller World Market

With competitor supply also up, the U.S. market share is forecast to tumble to its smallest since 1985/86.

Major competitors, including Canada and Argentina, are forecast to increase their exports slightly in 1990/91. The EC is expected to at least match last year's exports. Australia's exports are expected to fall slightly. Smaller exporters, including Sweden, India, and Turkey are expanding their exports substantially in 1990/91 because of large crops and implicit export subsidies.

Large competitor crops and little expansion in exports will result in near-record ending stocks, particularly in Canada and the EC. Even Australian stocks are forecast up. The Australian Wheat Board generally does not hold much stocks, but this year farmers are apparently keeping an unusually large quantity of stocks off the market, waiting for prices to rise or using the wheat for feeding.

It is likely that competitor production will fall in 1991/92. However, given large competitor carry-in stocks, production would have to drop sharply to keep competitor supplies from being even greater than in 1991/92 than in 1990/91. Continued large competitor supplies is likely to lead to continued strong competition and low world wheat prices in the coming year.

The U.S export pace through January 1991 was the slowest since 1985/86 when the United States exported only 25 million tons. In 1990/91 (July/June), U.S. exports are forecast at 27.5 million tons, 18 percent below 1989/90, and the share of world trade is expected to reach only 29 percent.

While U.S. exports to several regions are down, the slow pace can be mostly attributed to the drop in exports to four countries: the Soviet Union, China, Egypt, and Iraq. Other competitors have gained market share in the Soviet Union. China's total imports are down. Delays in the signing of its P.L. 480 agreement has slowed Egypt's imports, and the embargo on Iraq has stopped all U.S. exports to that country since August 1990.

The EEP program has helped the United States to maintain what market share it has in North Africa, the Soviet Union, China, and several other important wheat markets. EEP bonuses averaged $44.45 per ton in January, more than 60 percent of many of the reported f.o.b. sales prices. The bonuses have enabled U.S. wheat to be priced competitively with EC wheat in many markets. EC export restitutions reached an average of $155.87 in January, more than double reported f.o.b. sales prices.

The 1990 farm bill established a minimum of $500 million annually for the EEP. However, the fiscal year 1991 appropriations act effectively capped fiscal 1991 funds at $425 million. As of February 22, a total of $364 million of EEP funds had been used in fiscal year 1991, of which, $311 million dollars had been used for EEP wheat sales. The administration has requested EEP funds of $900 million for fiscal year 1991 and for $1.2 billion in fiscal year 1992. If approved, the increase would be particularly important for the first quarter of the 1991/92 (June/May) marketing year.

The fiscal year 1991 program level for GSM-102 and GSM-103 are $5 billion and $500 million, respectively, with an additional $200 million in credit guarantees for emerging democracies. Total GSM-102 funds equal $5 billion for fiscal year 1991. As of January 25, 1991, $766 million of GSM-102 credit had been allocated for wheat and flour compared to $1 billion at the same time in fiscal year 1990. The major recipients have been Algeria, the Soviet Union, and South Korea. Under GSM-103, wheat and flour allocations were about $220 million, compared to about $240 million at the same time in fiscal 1990. This year, major recipients are Morocco, Sri Lanka, and Algeria.

Under the 1990 Act, management responsibilities for the P.L. 480 program are changed. USDA is required to implement and administer Title I, the concessional sales and market development program, and the Agency for International Development (AID) is required to implement and administer both Title II (donations) and the new Title III (government-to-government grants program). The transition in lines of authority has created some delays which could push some P.L. 480 wheat exports into 1991/92 (June/May) marketing year.

P.L. 480 Title I/III allocations for wheat and flour in fiscal year 1991, as of January 31 have reached $2.8 million, compared to $2.1 million at the same time in fiscal year 1990. However, the volume of sales registered as of February 8, was only about 40 percent of the sales registered at the same time a year ago.

The results of the General Agreement on Tariffs and Trade (GATT) negotiations are likely to have serious repercussions for world wheat trade and the U.S. wheat industry in coming years. In December 1990 the Uruguay Round of the GATT talks faltered due to problems in the agricultural arena. The problems mainly stemmed from the EC's refusal to make greater concessions on farm policy. The GATT's goal of liberalizing world trade would have many potential benefits for the United States and other countries.

There are signs that the EC may now be prepared to consider some changes in its Common Agricultural Policy. EC Agriculture Minister MacSharry recently unveiled a reform proposal that would cut support to larger farmers who produce the bulk of EC crops and livestock, while providing some direct income support to needier farmers. The net impact of the proposal would be to reduce production and export subsidies and curtail EC budget expenditures. There is opposition to this proposal within the EC. Uncertainty also remains about what the proposal's impact will have on the EC's 1991/92 budget and on its stance in the GATT discussions. It is possible that the proposal might signal more willingness to change and contribute to lowering trade tensions—perhaps even leading to continued GATT talks.

Figure 4
World Wheat Trade and U.S. Share

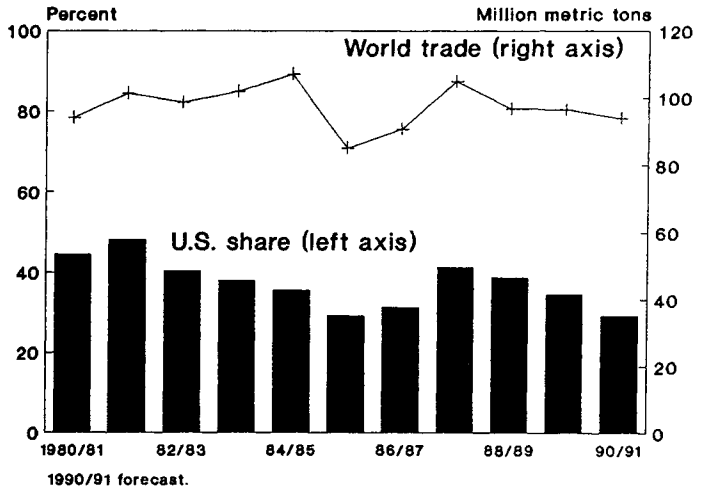
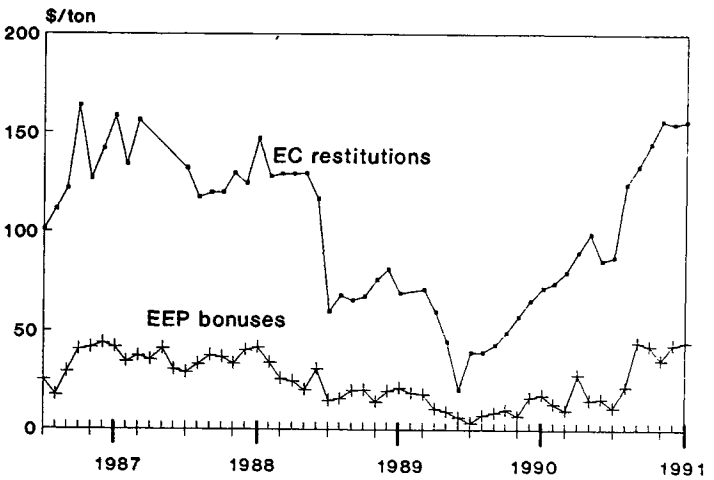


Figure 5
U.S. and EC Wheat Export Subsidies



Supply/Demand Fundamentals Generating Atypical Patterns

The large jump in U.S. wheat supply continues to outstrip demand, disrupting normal seasonal patterns and/or expectations. Prices are not following a normal seasonal pattern, and imports, food use, and feed and residual use have posted some surprises in the first half of the marketing year.

Supply Up 20 Percent, Exports Forecast Down 17 Percent

Record yields pushed U.S. 1990 production to a near record 2.74 billion bushels, more than offsetting the lowest beginning stocks since 1975/76. The forecast total supply of 3.3 billion bushels is the largest since 1986/87. Unfortunately, the large U.S. crop coincides with record to near-record crops in many countries, leading to a sharp decline in U.S. export prospects.

Wheat prices normally are lowest near harvest time when U.S. supplies are the largest and then trend upwards in the later months as supplies shrink. In 1990/91, however, prices have continued down through the first 8 months of the marketing year, as export prospects deteriorated. The season-average price received by farmers is forecast to range between $2.55-2.65 per bushel.

Imports Enter at Record Pace

U.S. wheat imports have historically been insignificant but are forecast to increase more than 50 percent in 1990/91 to over 1 percent of total supplies (note the new appendix table on monthly imports). Early 1990/91 imports are up largely because of increased shipments of eastern white wheat from Canada. With the quality of U.S. eastern white wheat reportedly below normal, food processors have turned to Canadian supplies. Durum, pasta products, and red spring wheat continue to be imported. The U.S.-Canada Free Trade Agreement subsidy calculations could find Canadian wheat subsidies matched or exceeded levels in the United States, thus opening the Canadian market to U.S. wheat, and leading to the possibility of more symmetrical wheat trade (see the January 1991 *World Grain Situation and Outlook*, FAS).

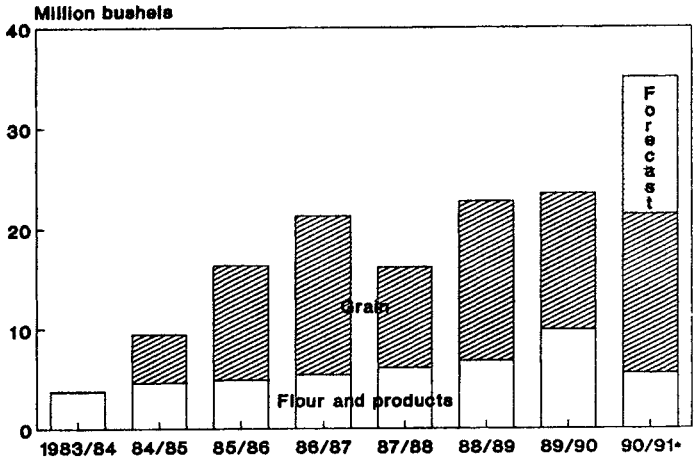
Table 1--Wheat supply, disappearance, and stocks, June-May

Item	1988/89	1989/90	1990/91
		Million bushels	
Stocks, June 1	1,261	702	536
CCC inventory	283	190	117
Farmer-owned reserve 1/	467	287	144
Outstanding CCC loans	178	19	30
Uncommitted	333	206	245
Production	1,812	2,037	2,739
Imports	9	6	8
Total supply	3,082	2,744	3,283
Use, June-Aug.			
Food	183	183	197
Seed	1	2	2
Feed & residual	282	271	406
Exports	362	370	268
Total use	828	826	873
Stocks, Sept. 1	2,254	1,918	2,410
CCC inventory	250	168	105
Farmer-owned reserve 1/	391	211	119
Outstanding CCC loans	108	48	120
Uncommitted	1,505	1,491	2,066
Imports	6	5	13
Total supply	2,260	1,923	2,423
Use, Sept.-Nov.			
Food	197	183	212
Seed	67	68	61
Feed & residual	-49	-79	-37
Exports	329	329	278
Total use	544	501	513
Stocks, Dec. 1	1,716	1,423	1,909
CCC inventory	213	155	130
Farmer-owned reserve 1/	383	174	65
Outstanding CCC loans	93	80	261
Uncommitted	1,027	1,014	1,453
Imports	4	5	
Total supply	1,720	1,427	
Use, Dec.-Feb.			
Food	169	181	
Seed	3	3	
Feed & residual	-41	41	
Exports	361	260	
Total use	492	484	
Stocks, March 1	1,228	943	
CCC inventory	203	137	
Farmer-owned reserve 1/	378	154	
Outstanding CCC loans	47	65	
Uncommitted	600	587	
Imports	4	8	
Total supply	1,232	951	
Use, March-May			
Food	165	184	
Seed	32	28	
Feed & residual	-35	-73	
Exports	368	275	
Total use	530	414	
Stocks, June 1	702	536	
CCC inventory	190	117	
Farmer-owned reserve 1/	287	144	
Outstanding CCC loans	19	30	
Uncommitted	206	245	

1/Includes Special Producer Loan Program.

Figure 6

U.S. Wheat Imports, 1983/84 - 1990/91



*Data are for June-Dec, 1990. 1991 projected.

Figure 7

Monthly Wheat Imports, 1988/89 - 1990/91

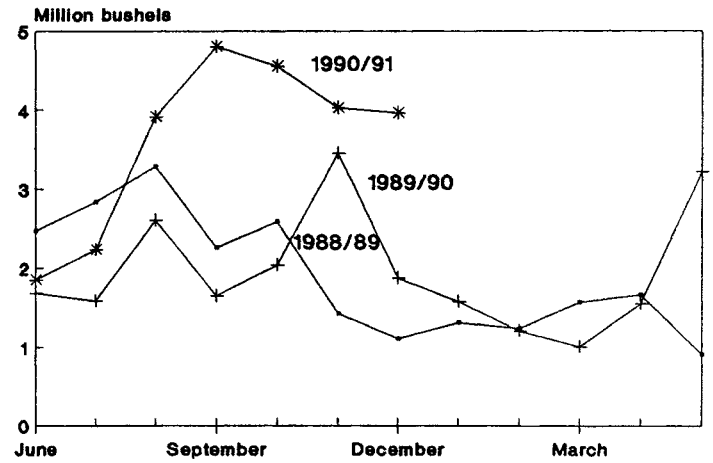
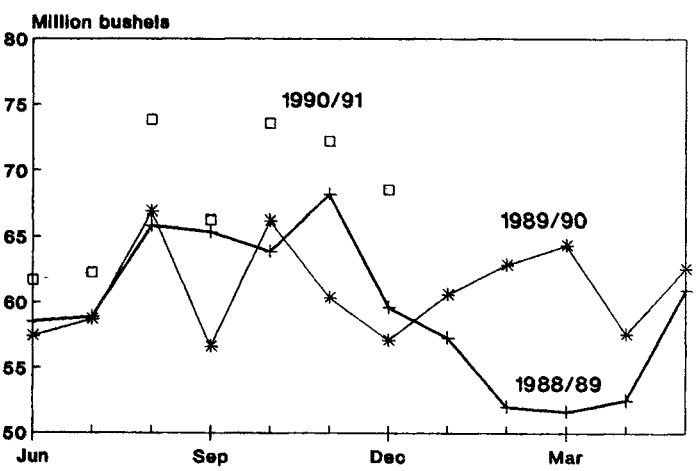


Figure 8

U.S. Wheat Food Use, Monthly



Food Use Forecast Up 5 Percent

Wheat food use depends largely on the size of the population, with year to year changes stemming from long-term trends in population growth and changes in dietary tastes and preferences. Price changes are considered to have relatively little effect on food use in countries as affluent as the United States. In 1990/91 wheat food use is forecast up sharply from 1989/90, but in line with trend growth from 1987/88 and 1988/89. Record mill grind and modest flour exports in the first half of the marketing year support increased food use.

Record Feed and Residual Use Forecast

The normal quarterly pattern of feed and residual use in recent years is for the first quarter to be large and positive, the second quarter to be negative, with the second half of the year small, either positive or negative. In 1990/91 wheat prices favored extensive feeding of wheat, and the first quarter posted record feed and residual use. With wheat prices continuing low through last fall and into the winter, and with numerous reports of continued wheat feeding, many trade analysts believed the stage was set for the implied second quarter feed and residual to be positive. However, the second quarter's feed and residual use came in negative. In the second half of 1990/91, residual use is expected to be positive.

Ending Stocks Forecast To Reach Nearly 1 Billion Bushels

Total use of wheat is forecast to increase in 1990/91 as increased domestic use more than offsets lower exports, but the increase in production swamps the increased use, pushing stocks up over 80 percent.

CCC inventory is forecast to increase modestly to 170 million bushels as almost all old FOR loans will mature by February 1991 (see special article), and a majority is expected to be forfeited to the government. Market prices are expected to remain above the loan redemption rate, so regular 9-month loans for 1990 are not expected to be forfeited.

An increase of almost 200 million bushels is forecast in outstanding 9-month loans at the beginning of the 1991/92 year. Lower wheat prices have encouraged more loan placements, and farmers who intend to enter wheat in the new FOR can do so only after their wheat has been under regular loan for 9 months.

Figure 9

Average Farm Prices for Wheat and Corn

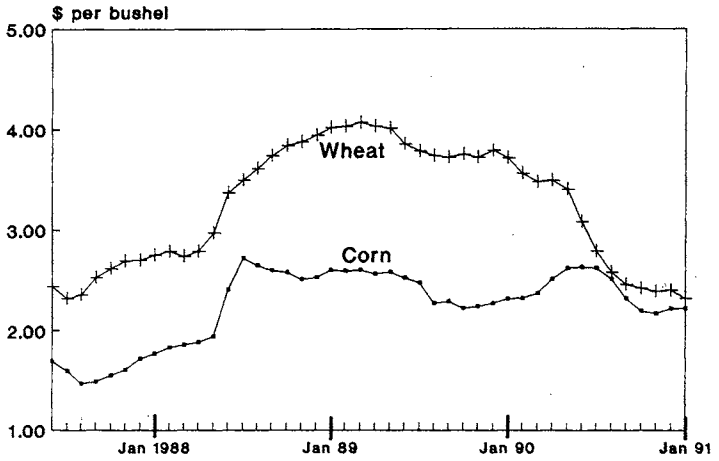
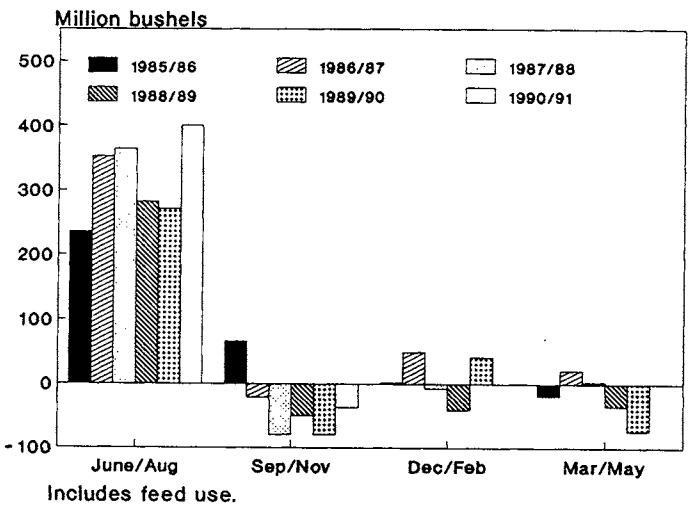


Figure 10

Quarterly Residual Use



Includes feed use.

Trends in U.S. Flour Milling

Several of the largest flour milling companies have more than doubled their mill numbers and daily capacities between the early 1970's and 1990, realigning their relative size rankings and increasing the concentration of holdings. However, many in the industry agree that flour milling remains highly competitive. Currently, the performance consistency of flour is a pressing concern.

Flour consumption in the U.S. has grown almost steadily since 1970, with per capita intake rising 24 pounds, or an average of over 1 pound each year (see appendix table 19). Growing interest in healthy eating and convenience have set the pace for this growth. Consumers have been boosting their consumption of fiber, bran, and whole grains. At the same time, they are buying more highly processed convenience foods—like sandwiches, pizzas, pastas, and tortillas—which often contain large amounts of flour.

Mills Decline In Number, but Increase In Capacity

Strong flour demand has meant growth for many firms in the milling industry. But even though new plants have been built, most of this industry growth has been in the size of plants, not in mill numbers. Economies of scale in processing and transportation are largely responsible for the drop in mill numbers and the large increases in capacity per plant.

The decline in mill numbers reflects a long-term trend toward consolidated production. Total wheat flour and durum mill numbers fell from 292 mills in 1973 to 219 in 1990[1]. The closing of small mills has offset the escalating number of large-capacity mills (see table). Small mills often close or carve out niches in specialty markets.

Figure 11

Per Capita Disappearance of Wheat Flour

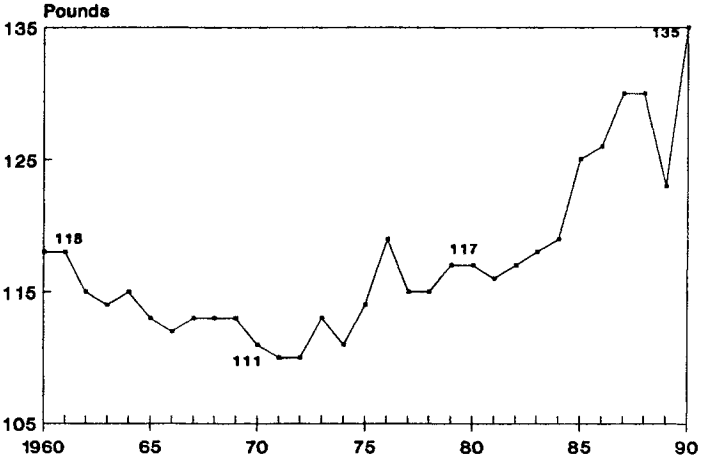


Table 2--Number of wheat flour and durum mills by mill size

Daily capacity 1/	1973	1978	1983	1987	1990
			---Number---		
Under 200 cwt	54	46	34	21	18
200-399 cwt	35	34	30	22	17
400-999 cwt	36	26	20	18	14
1,000-4,999 cwt	82	71	67	65	66
5,000-9,999 cwt	60	64	58	59	58
10,000 cwt and over	25	33	42	44	46
Total	292	274	251	229	219

1/ Includes hard, soft, whole wheat, and durum mills.
Source: Calculated from Milling Directory/Buyers' Guide (10).

[1]Most of the data reported in this module are obtained from the *Milling Directory/Buyers' Guide*, published annually by Sosland Publishing Company. It represents the most comprehensive source of information on mill locations and plant capacities. The milling industry regards these numbers as a benchmark. The tables presented here differ slightly from those presented in the *Milling Directory/Buyers' Guide*. Data reported in the *Census of Manufactures*, SIC Code 2041, is not used in this module. Census data includes not only flour mills, but other establishments "primarily engaged in milling flour or meal from grain, except rice," including dry corn, buckwheat, and rye mills.

As the number of mills has dropped, the average capacity per mill—as well as total industry capacity—has increased. Total industry capacity increased 28 percent between 1973 and 1990 and average mill size rose 70 percent. The largest mills (with over 10,000 hundredweight daily capacity) accounted for 54 percent of total capacity in 1990, up from 35 percent in 1973.

Economies of scale are a major factor explaining these overall increases. Millers indicate that, within limits, plant capacity can be enlarged at a less-than-proportionate increase in energy and equipment costs. Per unit labor costs can drop sharply with larger output because the size of operating crew required for a larger plant is comparable to a smaller one. Unit transportation costs are also frequently lowered because larger mills can often negotiate lower rates on the basis of volume than their smaller counterparts.

Acquisitions and Ownership Changes Have Been a Major Trend

Ownership of many flour milling companies has changed in the past 20 years. Several of the largest milling companies more than doubled their mill numbers and daily capacities between the early 1970's and 1990, realigning their relative size rankings (see table). Many of these acquisitions have been made by firms that have sizable agribusiness interests.

The rationale behind these milling acquisitions is not always clear. By expanding their plant holdings and, in certain cases, integrating vertically, some companies may be able to improve their profitability through cost reduction. They may be able to negotiate lower transport rates, improve scheduling, and spread production, marketing, and financial risks over a larger volume of activity.

A greater number of plants held by a company does not, however, necessarily assure lower costs and higher profits. Discussions with the trade suggest that less intrabusiness use of procurement economies occurs than might be expected. Different operations are commonly treated as competing profit centers, with profit maximization goals

Table 3--Daily flour milling (wheat flour and durum) capacities owned by companies with over 10,000 cwt of daily capacity 1/

Company	1973	1978	1983	1987	1990
			---1,000 cwt---		
ConAgra, Inc.	88.3	93.0	216.5	191.5	276.5
ADM Milling Co.	79.5	96.0 2/	123.0	167.7 3/	193.7
Cargill, Inc.	9.0	46.0	134.0	141.1	149.2
Pillsbury, Inc.	94.7	111.6	121.4	2/ 131.7 4/	119.7
Seaboard Allied Milling Corp.	62.25	91.0	(Cargill)	(Cargill)	(Cargill)
International Multifoods Corp.	71.7	71.9	78.1	80.3	(ConAgra)
Dixie-Portland Flour Mills	33.0	47.0	51.0	55.0	5/
Peavey Co.	59.1	98.5	(ConAgra)	(ConAgra)	(ConAgra)
General Mills, Inc.	55.1	55.1	55.1	62.25	66.7
Nabisco Brands, Inc.	40.0	44.5	43.0	6/ 28.0	28.0
Ross Industries	33.0	(Cargill)	(Cargill)	(Cargill)	(Cargill)
Cereal Food Proc., Inc.	17.0	21.9	31.3	68.3	68.3
Bay State Milling Co.	29.65	34.9	34.0	55.75	50.65
Colorado Milling and Elevator Co.	29.2	(Peavey)	(ConAgra)	(ConAgra)	(ConAgra)
Mennel Milling Co.	15.0	17.0	21.0	21.0	22.7
Fisher Mills, Inc.	15.0	15.0	15.0	15.0	15.0
Bartlett Milling Co.	--	14.0	15.0	13.0	13.0
Tennant and Hoyt Co.	7/	10.0	11.0	(Pillsb.)	(Pillsb.)
Centennial Mills	19.0	2/ 24.0	(ADM)	(ADM)	(ADM)
Standard Milling	14.5	16.3	(Uhlmann)	(ConAgra)	(ConAgra)
Sunshine Biscuits	12.15	7/	7/	(ConAgra)	(ConAgra)
North Dakota Mill	10.0	10.0	18.0	18.0	18.0
Acme-Evans	7/	7/	10.0	12.0	(ADM)
Italgrani USA, Inc.	--	--	--	15.64	15.64
Amber Milling Co.	7/	7/	7/	7/	15.0
Midwest Grain Products	--	--	--	--	14.0

-- = Not listed in the Milling Directory/Buyers' Guide.
1/ Acquiring milling companies are in parentheses.
2/ Includes alternating durum capacities.
3/ Does not include 31,000 cwt daily capacity held by ADM Holding Co. (formerly Dixie-Portland).
4/ Pillsbury announced on Jan. 28, 1991 that it had reached an agreement to sell 4 of its 8 flour mills to Cargill. This action would increase Cargill's total milling capacity by 51,700 hundredweight.
5/ Held by ADM Holding Co.
6/ All but 1 mill acquired by ADM.
7/ Less than 10,000 cwt daily capacity.
Source: Milling Director/Buyers Guide (10).

that may be incompatible. The operations of several agribusiness firms have been sold off in the late 1980's, including all of the flour mills owned by International Multifoods, Inc.

Greater Concentration Has Accompanied the Acquisition Trend

As the largest milling firms have expanded their holdings, concentration in the industry has increased substantially. In 1990, the top 12 companies owned about 80 percent of all milling capacity, up from 68 percent in 1973. They currently own 108 wheat flour and durum mills, accounting for about 50 percent of all U.S. flour mills. The top 12 companies account for all but one of the U.S. flour mills with 10,000 hundredweight or more of daily capacity.

The top four firms (ConAgra, ADM, Cargill, and Pillsbury) have collectively increased their market share at a fast pace in the 1980's. As a group, they owned about 58 percent of all industry capacity in 1990, up from the 33.5 percent held by the top four firms in 1973.

Competition Appears To Remain Strong

Although concentration has increased rapidly, many in the milling industry agree that flour milling remains highly competitive. Millers often appear to treat flour as a very price-sensitive product, believing that the lowest price, highest volume operation gets the business (*5, 7*). Two examples help provide evidence: (*11*)

- The cost of the wheat needed to produce a hundredweight of bakery flour (Kansas City standard patent) averaged $6.45 for January, 1991, about the same as the cost in mid-1986. But the milling margin, at $2.05 in January, 1991, is lower than most of the margins calculated in the 1980's, and more than 25 cents less than the margin in mid-1986.[2]

[2]The milling margin is the sum of bakery flour and millfeed prices per hundredweight of flour produced, less the cost of the wheat needed to produce a hundredweight of flour.

Table 4--Concentration of milling capacity among wheat flour and durum mills

Size grouping	1973	1978	1983	1987	1990
	---Cwt of capacity---				
4 largest	334,200	399,100	594,900	632,000	739,100
8 largest	550,650	664,100	822,100	898,600	952,750
12 largest	675,500	813,500	926,400	1,020,600	1,024,090
All firms	997,107	1,099,610	1,174,206	1,217,276	1,271,923
	---Percent share of market---				
4 largest	33.5	36.3	50.7	51.9	58.1
8 largest	55.2	60.4	70.0	73.8	74.9
12 largest	67.7	74.0	78.9	83.8	80.5
All firms	100.0	100.0	100.0	100.0	100.0

Source: Calculated from Milling Directory/Buyers' Guide (10).

- The mid-month price of bakery flour in January, 1991, at $7.05 per hundredweight, is the lowest since the 1970's and about a third below prices in the early 1980's.

Going back in time, the milling industry has been quite competitive historically. For instance, one industry study stated that net income (after taxes), as a percent of sales, ranged from -0.11 to 3.28 percent for major milling firms between 1977 and 1982. (*3*) For diversified firms, the study found that the earnings of flour milling divisions were lower than the total companies' average earnings.

Millers in the late 1980's have often mentioned the importance of focusing on quick and accurate responses to bakers' needs, consistent product quality, and the development of market niches. (*5*) Some observers have noted the importance of a heightened focus on innovation, segmentation of markets, and focusing on greater cost-effectiveness (*6*).

Performance Consistency is a Pressing Concern

The 1990's are also likely to bring an increased focus on the performance consistency of flour. Some baking analysts contend that the baking performance of flour has dropped substantially in the past 25 years (*1, 2, 4*). This is one of the most pressing current issues in the milling and baking industries.

Several factors substantiate the fact that flour performance has declined. For instance, one baking company executive reported that in 1975 more than 96 percent of the company's bake tests (which summarize grain, texture, feel, and color) yielded an acceptable bake score (*4*). By 1987, less than 50 percent of all flour met their requirements, and in 1989 it was less than 15 percent. Over this period, the company used the same equipment and the same method and formula. In addition, the same individuals performed the bake tests since 1973. (See box for factors accounting for the decline in performance.)

However, the relationship between laboratory tests and flour performance is a complex issue. First, lab tests differ in importance to different types of bakers. Lab tests appear to be a special issue for soft wheat bakers, who produce a wide variety of cookies, crackers, cakes, and pastries (*9*). Second, lab tests do not necessarily reflect conditions in the production plant. Two lots of flour with the same lab analysis rating can bake quite differently. At times, tests show virtually no correlation between lab analysis and baking performance (*4*).

Bakers have increasingly used additives to produce a commercially acceptable bakery product. These additives include oxidants and vital wheat gluten, which strengthen the protein and assist with gas retention. In the past, they were used sparingly, or not at all, but today they are often used at their legal limits (*4*).

Industry analysts indicate that several factors may have contributed to the change in flour performance: (*1, 2, 4*)

- Genetics—Producers encouraged breeders to produce higher yielding varieties that resisted disease. Breeders focused on higher yields, with less emphasis given to the end product performance of flour.
- Proliferation of wheat varieties—Wheat varieties that represented 85 percent of 1986's acreage planted in Kansas did not exist in 1977. The varieties planted in 1977 likely had better baking characteristics.
- Agronomics—Increased irrigation and fertilization of wheat and grains may have reduced flour performance.
- Milling efficiencies—Changes in milling practices may have been a factor.
- Drop in protein content—The decline in performance in the 1980's occurred in conjunction with a decline in the average protein content in wheat. However, protein quality is as important as protein quantity.

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Wheat by Class

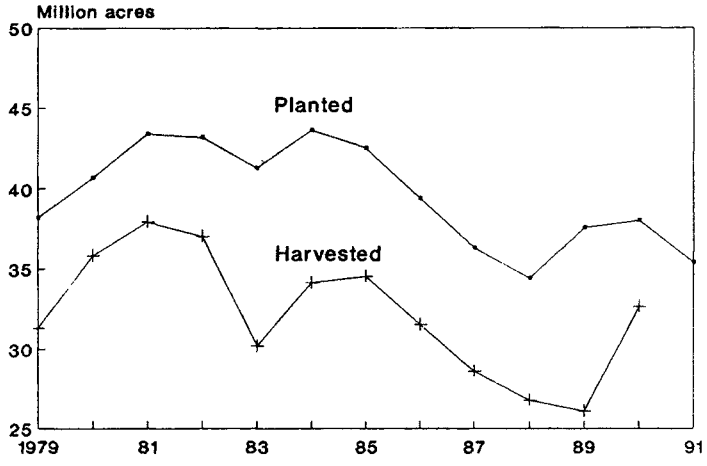
Spring Wheat Leads 1990 Crop FOR Entries

Over half the 1990-crop wheat intentions to enter the FOR is HRS or Durum, with 55 percent of intentions coming from North Dakota, Minnesota and South Dakota.

HRS accounts for only 26 percent of forecast 1990/91 total ending stocks, but it represents 45 percent of farmers' FOR intentions. Price differentials are likely one of many reasons encouraging large HRS entry into the FOR.

Average farm prices of HRS (the other spring wheat price for North Dakota published in *Agricultural Prices* is a HRS price) are normally lower than the national average for all wheat, largely because of transportation costs. In 1990/91 the HRS average farm price in North Dakota has been 5-13 cents per bushel less than the national average for all classes. HRS farm prices have remained lower than average even though terminal markets have gone from a discount in 1989/90 to a premium in 1990/91. For example, HRS carries a premium when Minneapolis prices are compared to Kansas City prices, or when HRS and other classes are priced at ports.

Figure 12
HRW Area Planted and Harvested



HRW Plantings Down, Exports Continue Torpid

Based on winter wheat seedings, ERS estimates that HRW planted area for harvest in 1991 dropped only 8 percent. The ARP increased to 15 percent from last year's 5 percent or less with modified contracts. Moreover, low wheat prices might have been expected to discourage wheat seedings. However, the adjustment is likely to come in harvested area.

The sorghum planting intentions (up 19 percent) are a clue that some wheat farmers may choose to use normal flex acres (NFA) instead of the winter wheat option.

A simple example is helpful. Assume a HRW farm with 100 acres of base and a program yield of 35 bushels per acre. If the farmer chooses NFA, deficiency payments on 15 percent of base acreage would be lost or:

$1.40 (estimated deficiency payment) x 35 bu./acre x 15 acres = $735.

However, a higher estimated deficiency payment (based on the 5-month- average farm price instead of the 12-month price) can be received on 70 percent of base. The difference between the estimated deficiency payment rates for the winter wheat option and NFA alternative is 7 cents per bushel, so the farmer gains:

$0.07 (higher deficiency payment) x 35 bu./acre x 70 acres = $171.50.

The net loss is $563.50, or less than $38 per acre removed from winter wheat production. This loss in government payments could be easily offset by expected net returns per acre of $50-75 per acre for sorghum, plus the graze-out value of the winter wheat. A key is how the graze-out value of the wheat compares to the cost and return of harvesting it for grain. Given the low wheat prices and strong cattle prices, graze-out may be enticing, especially if the wheat farmer does not have to purchase cattle.

HRW exports continue at a slow pace. According to USDA's *U.S. Export Sales*, through January, shipments plus outstanding sales were down 14 percent from 1989/90's pace. Despite a larger crop, 1990/91 exports are forecast to reach only 335 million bushels, down 7 percent from last year and 63 percent less than the 1987/88 record.

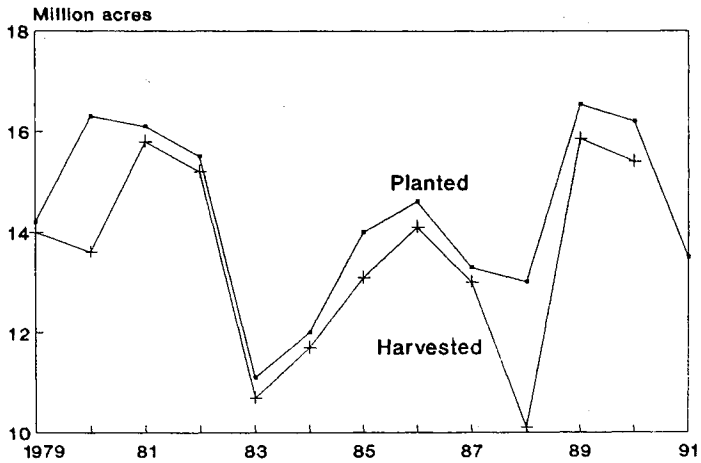
A forecast expansion in domestic use is more than offsetting the export decline, pushing total use of HRW up 18 percent as more is feed and residual use. Use, however, will still be well below production, and ending stocks are forecast to more than double to 469 million bushels. HRW farmers only intend to put 82 million bushels in the FOR, so most of the HRW stocks may be readily available at low market prices during 1991/92.

HRS Use Down 8 Percent

A forecast increase in domestic use is partially offsetting reduced exports, but use will trail increased production, swelling ending stocks more than 100 million bushels to 258 million. However, with 107 million of the 1990 crop

Figure 13

HRS Area Planted and Harvested



intended for the FOR, much of the HRS stocks may be held on farm by farmers loath to sell at low prices. The June 1, 1991, stocks of HRS readily available to the market at current prices may be little changed from last year.

Making modest assumptions about white spring wheat (see white wheat section), early planting intentions imply a 17-percent decline in 1991 HRS area.

SRW Stocks Forecast Near Record High

SRW ending stocks are forecast at 76 million bushels, almost matching the 1985/86 record (79 million). Exports are forecast down by more than a third. China and Egypt account for most of the reduction through the first part of the year. Both had record production in 1990.

Residual use (including feed use) is expected to increase dramatically, pushing domestic use up almost a third, but not enough to offset lower exports. Total use is forecast down almost 10 percent, leading to the stock increase.

Area planted for 1991 is estimated down 19 percent based on winter wheat seedings. This dramatic reduction is not surprising given the increased ARP faced by program participants, the low wheat prices confronting nonprogram participants, the many alternatives crops available to SRW producers, and disappointment in some SRW areas over last year's yields. The large reduction in area makes it likely that production will be down in 1991. The production decline may be enough to offset increased beginning stocks, leaving 1991/92 supplies potentially down.

White Wheat Trade Increasing

White wheat is the only class forecast to have increasing exports in 1990/91. Through January, Egypt bought less wheat in total from the U.S., but increased purchases of white. This offsets reduced purchases by Pakistan, supporting an export forecast 10 percent above last year's. However, exports will be down 14 percent from 1988/89, when demand from South Asia was stronger.

Imports are also forecast up sharply, as the United States imported a sizable portion of Canada's eastern white wheat crop. Although up sharply, imports are forecast to account for only 2 percent of total white wheat supplies.

Increasing exports, combined with increased domestic use, will boost forecast total white wheat use over 20 percent. However, the 25-percent jump in 1990 production provides the supplies to increase ending stocks, despite the increased use. Stocks are forecast to reach 103 million bushels by the end of 1990/91, up over 20 percent.

ERS estimates 1991 area planted to white wheat at 4.8 million acres, down 10 percent, based on winter wheat seedings. White spring wheat plantings are also assumed down similar to white winter wheat and in line with reported spring wheat planting intentions. White wheat farmers may be reducing area less than some analysts expected, given the increased ARP and low prices, because there may be fewer attractive alternatives to wheat in the Pacific Northwest. Moreover, the forecast stocks-to-use ratio, a measure of how tight the market

is, is the same for 1990/91 as it was for 1989/90.

Durum Area Intentions Increase Slightly, Stocks Forecast Up Over 50 Percent

U.S. durum farmers faced increasing premiums over HRS during January. Canada's early planting intentions indicated a large drop in durum area, but Canadian durum stocks are expected to be very large. This allows Ag Canada to forecast increased durum exports in 1991/92 despite expected lower production.

The U.S. supply and demand balance does not indicate a shortage of durum. Durum production increased sharply in 1990, boosting forecast supplies. Despite lower U.S. prices in 1990/91, imports from Canada have continued. Total durum imports, including the grain equivalent of pasta imports, are forecast to contribute 8 percent of U.S. durum supplies.

Exports are forecast down slightly, although through mid-February, increased sales to Poland and Algeria offset the E.C.'s reduced purchases. Much of the increased 1990 production is forecast to end up in higher stocks, pushing durum stocks to 76 million bushels. The planting intentions cast the specter of further large stock increases in 1991/92. If 1991's production matches 1990's, it would take record high exports to keep ending stocks from increasing, assuming continued stable domestic use and imports.

Figure 14
White Wheat Area Planted and Harvested

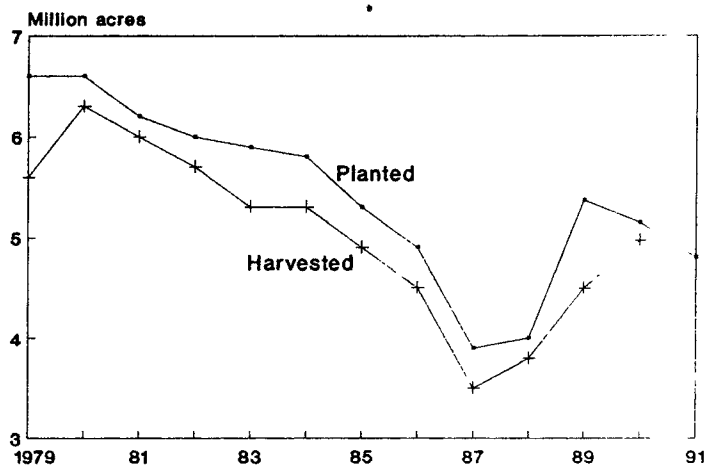
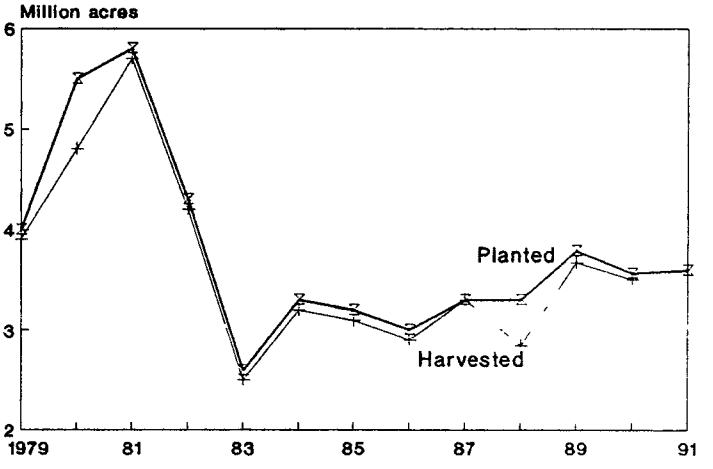


Figure 15
Durum Area Planted and Harvested



Special Article

The Farmer-Owned Reserve—Old Name, New Game: An Analysis of New Rules and 1990 Wheat Crop Entry

by
Craig Jagger and Joy Harwood[1]

Abstract: The farmer-owned reserve (FOR), which encountered major revisions in 1990 farm legislation, was recently opened by USDA for entry of 1990-crop wheat. The FOR helps support wheat prices by reducing free stocks, which have increased sharply during the 1990 crop year. It also gives producers additional time to evaluate market opportunities. A 300-million-bushel maximum FOR quantity was established. However, the FOR producers' intentions report indicates that farmers will enter at most 239 million bushels of 1990-crop wheat. The effects of 1990 entry on wheat supply, prices, and wheat-sector income is estimated to be relatively small because free stocks of wheat are estimated to remain large.

Keywords: Farmer-owned reserve, storage programs.

The farmer-owned reserve (FOR) is a familiar name, having been part of policy vocabulary since the original program was authorized by the Food and Agriculture Act of 1977. But the reauthorization of the FOR by the Food, Agriculture, Conservation, and Trade Act of 1990 (the 1990 Farm Act) made major changes in the operation of the FOR. In many ways, the FOR is now a new program under an old name. This article focuses on the provisions of the "new" FOR and USDA's recent decision to open the FOR for 1990-crop wheat. The analysis presented is based on USDA's supply and use estimates from early December 1990. It was prepared as part of USDA's decision-making process (*7*). USDA's supply and use estimates have been revised since then.

Background and Operation of the "Old" FOR

The FOR—old or new—is a variation of the regular, non-recourse, 9-month, Commodity Credit Corporation (CCC) wheat loan[2]. These loans generally operate in the following manner. Producers participating in the wheat program can obtain a 9-month loan from the CCC, using their wheat as collateral. The producers are responsible for any storage expenses and may repay the loan principal (with interest) at any time during the loan period. If the loan is not repaid by the end of the loan period, the CCC must take title to the grain in lieu of repayment. That is, the CCC has "no recourse" other than to accept the wheat as full repayment of the loan and interest—hence, a "non-recourse" loan.

The "old" FOR was established in 1977. Despite the many program variations and rule changes that have occurred since 1977, general themes have stayed reasonably consistent. The following discussion presents general themes rather than specific program rules at a particular time.[3]

In general, the old FOR was designed to provide wheat producers with longer loan terms (3-5 years) and with annual government-paid storage payments. However, the FOR was not necessarily offered to producers each year. It was generally implemented when supplies were large and prices low. The FOR loan rate was sometimes higher than the 9-month loan rate. Interest was often subsidized. Minimum and maximum

Since 1986, producers have been able to redeem 9-month and FOR loans with generic commodity certificates. USDA has issued certificates in lieu of cash payments for deficiency payments, ad hoc disaster assistance, bonuses under the Export Enhancement Program, as well as other programs. The certificates are negotiable and producers may sell them or buy them in the open market. The following is an example of how producers may use generic commodity certificates to redeem CCC 9-month and FOR loans.

Each certificate has a face value—for example, $1,000. To determine the number of wheat bushels that can be redeemed by a $1,000 certificate, the face value of the certificate is divided by the posted county price (PCP) for the day. The PCP is determined daily in each ASCS county office based on terminal prices and a local basis. The PCP is a proxy for the local market price.

If the posted county price on a given day is $2.50 per bushel, a $1,000 generic certificate will redeem 400 bushels of wheat on that day. When loans are redeemed with certificates, no interest is charged. If the original loan rate for the FOR wheat was $4.00 per bushel (the 1982 FOR loan rate), producers would, in effect, pocket the $1.50 per bushel difference between the original loan rate and the certificate repayment rate.

[1]Jagger is a wheat analyst with the Commodity Analysis Division, ASCS. Harwood is an agricultural economist with the Crops Branch, ERS. Brad Karmen of ASCS helped develop the estimated impacts of 1990-crop FOR entry presented in this article.

[2] The general examples used in this article refer to wheat but operate in much the same way for feed grains.

[3] For more background information see (*2*, *6*, and *8*).

Table A-1--FOR provisions for Wheat in the 1985 and 1990 Farm Acts

	1990 Act	1985 Act (as amended)
Release price	None. Producers may sell FOR wheat at any time.	Market price equals or exceeds the higher of 140% of the announced loan rate or the target price.
Timing of storage	Paid at the end of each quarter for the last 3 months. Payments are prorated if grain is remove before the end of the quarter.	Paid one year in advance. Producers must repay unearned storage on grain removed before the end of the year.
Entry triggers	Secretary shall announce conditions of entry by December 15, including the maximum quantity allowed in FOR (see below).	Secretary shall announce conditions of entry as far in advance as practical, including the maximum quantity allowed in FOR.
	Discretionary entry: Secretary may allow entry if: 1) the market price for the 90 days preceding December 15 is less than 120% of the announced loan rate, or 2) as of December 15, the estimated wheat stocks-to-use ratio for the last day of the current marketing year is greater than 37.5%.	Secretary shall encourage participation whenever the total quantity of wheat in the FOR is less than 300 million bushels and the market price does not exceed 140% of the announced loan rate.
	Mandatory entry: Secretary shall allow entry if conditions 1) and 2) above are met.	
Contract length	Twenty-seven months from the date on which the original loan expired. At the Secretary's discretion, the loan can be extended for one 6-month period.	At least 3 years (typically 3-5 years), with extensions as warranted by market conditions.
Entry requirements	No direct FOR entry allowed. 9-month loan must mature before grain may be placed in FOR.	Secretary may allow direct FOR entry or may require that 9-month loans mature before grain may placed in FOR.
FOR loan rate	No less than original 9-month loan rate.	No less than original 9-month loan rate.
Storage payment stop trigger	Payments cease for any 90-day period immediately following the last day on which the market price equals or exceeds 95% of the target price.	Payments cease if the market price equals or exceeds 140% of the announced loan rate or the target price.
Interest payment trigger	May be charged by the Secretary when the market price equals or exceeds 105% of the target price.	May be charged by the Secretary when the market price equals or exceeds the target price.
Maximum quantity of wheat	300-450 million bushels.	30 percent of total use. (Secretary may increase by 10%.)

Sources: (2, 9).

FOR quantities have been changed several times.

Once placed in the old FOR, wheat could not be removed without penalty unless the FOR was in "release" status.[4] This occurred when market prices moved above a specified "release price" (most recently the prevailing target price). Once in release status, producers did not have to repay FOR loans, although producers were encouraged to do so because storage payments stopped and interest could be charged (see table A-1). In this way, FOR stocks were isolated from the market until prices recovered.

Advocates of the FOR saw definite advantages. They felt that the FOR would be beneficial for many reasons. First, the longer FOR loan term made price increases during the period more likely—thereby delaying and minimizing loan forfeitures to the CCC. Second, producers would have more "control" over stocks and the markets would be less subject to government "control and manipulation." Third, because producers retained title of the FOR grain, they would benefit from higher prices that occurred when stocks again became tight. Fourth, consumers would benefit when the FOR was in release status because FOR stocks would temper price increases. Fifth, producers, not the grain trade, would earn a large share of storage payments. Finally, advocates of the FOR felt that taxpayers would gain because producer ownership and storage was probably less costly than the costs of CCC ownership and storage.

The old FOR did not, however, work as well as its advocates hoped and no wheat has been allowed into the old FOR since the 1985 crop. By early 1988, wheat in the FOR was less than half the 1983 peak of just over 1 billion bushels. All wheat loans under the old FOR will have matured by the end of February, 1991.

[4] If a producer wanted to redeem the loan for cash before loan maturity and when the FOR was not in release status, the producer would have to repay the loan principal, previously paid storage, an early redemption penalty, and interest. In later years, certificates could be used to access FOR wheat without penalty. See box.

Problems With the "Old" FOR

During the debate over the 1990 Farm Act, policymakers in the executive and legislative branches expressed dissatisfaction with several provisions of the "old" FOR. USDA's comprehensive "green book" of farm bill proposals noted that:

> "The FOR has evolved into such a plethora of trigger prices, entry and extension decisions, storage payment rates, and interest charges, that it has become questionable whether the results justify the costs" (*12*).

Congressional Managers in the 1990 Farm Act's conference report noted that:

> "The Managers feel that the FOR has not been operated in an efficient manner. ... The program has had the effect of completely isolating the reserve from the market. ... The Managers intend that the changes made in the Act will allow for a more orderly flow of grain into and out of the FOR" (*3*).

Problems associated with getting grain out of the old FOR and into the market came from two sources: (1) pressure on USDA to extend FOR loans rather than let them mature, and (2) getting FOR loans redeemed even when market prices were relatively high.

USDA has often been encouraged to extend FOR loans. For example, the *New York Times* recently noted that political pressure is being exerted on USDA to extend old FOR loans from the 1985 corn crop (*11*). The final FOR wheat loans under the old FOR mature in February 1991. Some of these loans represent contracts initiated from the 1980 wheat crop. USDA extended these loans several times beyond their original contract term.

Throughout the 1980's, some producers have been unable or unwilling to redeem FOR loans, even when market prices were relatively high. One problem associated with cash redemption has been that the release price has, in general, been high relative to market prices.[5] The FOR has not been in release status for wheat during the last 10 years, since January 6, 1981.

Producers have had opportunities to redeem FOR wheat loans in ways other than cash redemption, though. Since 1986, producers have been able to use generic commodity certificates to redeem their FOR loans at the posted county price without penalty (*1*).[6]

Despite the opportunities provided by certificates, many producers have been reluctant to redeem their FOR loans. There apparently have been several reasons:

- High loan rates—The FOR loan principal amount from the high FOR loan rates of the early 1980's (e.g. $4.00 per bushel for 1982) exceeded market prices during much of the 1980's. Producers with FOR loans from high-rate years were guaranteed a return that was higher than the current market return if they simply maintained wheat in the FOR and forfeited it to the CCC at maturity.

- Insufficient returns from certificate redemption—High loan principal amounts could also be retained if FOR loans were redeemed with certificates (See box). Producers could repay the FOR loan at the posted county price (PCP) and pocket the difference between the original loan rate and the PCP repayment rate. For many producers, though, returns from redeeming FOR wheat with certificates and selling it on the market largely did not offset storage returns from maintaining wheat in the FOR.

- Storage returns—Part of producers' returns from maintaining wheat in the FOR has been through government storage payments. Redeeming wheat from the FOR before maturity caused farmers to lose annual FOR storage payments of 26.5 cents per bushel. Because storage payments were made for a year in advance, some farmers who redeemed loans in the middle of the year would have had to repay a portion of the storage payments they had received. An examination of ASCS's FOR storage reports would suggest that about 75 to 80 percent of FOR wheat has been stored on farms in recent years. FOR storage payments have offered a return to farmers' investments in storage facilities.

- FOR rotation policies—Some producers have taken advantage of FOR rotation policies that allowed them to rotate and sell FOR wheat as long as they replaced it within 60 days. Producers had an annual opportunity to sell wheat before harvest at higher prices and replace it with purchased wheat after harvest at lower prices (*10*).

- The rotation policy was designed to maintain the quality of wheat in the FOR. Producers were allowed to use purchased wheat for rotation because excessive supplies of grain in local storage facilities in the mid-1980's often precluded producers from storing grain they had produced at harvest. New rotation rules, adopted in 1990, state that: producers may replace FOR stocks only with grain produced on the farm, the replacement stocks must be of the same class, and the rotation can only occur after harvest (*3*).

- Tax provisions—Special Internal Revenue Code tax provisions have allowed producers to defer the declaration of the proceeds of CCC price support loans as income until maturity of the loan. For producers using these tax provisions, taxes have been due when wheat was redeemed from the FOR or forfeited to CCC (*4*).

To address the problems outlined above, the 1990 Farm Act redesigned the FOR. Policymakers felt that needed

[5] FOR release status is based on an all-class, 5-day-moving-average price calculated by ASCS based on terminal prices. The 5-day price has been below the FOR release price throughout most of the 1980's. Prices of individual classes of wheat have, however, been above the release price during this period (e.g., the farm price for durum wheat averaged $5.28 for August 1988).

[6] The first opportunity was with USDA's original payment-in-kind (PIK) program for the 1983 and 1984 wheat crops. This allowed grain to come out of the FOR even when the FOR was not in release status.

changes in the FOR were sufficiently important to make the new provisions effective immediately on December 1, 1990, for the 1990 wheat and feed grain crops. Most of the 1990 Farm Act's other provisions become effective with the 1991 crops.

Operation of the "New" FOR

The "new" FOR provisions legislated under the 1990 Farm Act focus on increased market responsiveness and greater commercial availability of stocks. These changes, detailed in table A-1, include:

- Producers may redeem FOR loans at any time without penalty.
- Storage payments will be made at the end of each quarter following FOR entry, rather than annually in advance.
- Rules regarding the conditions under which the Secretary of Agriculture may or must open the FOR are more specific.
- The FOR contract length is shortened to 27 months following expiration of a 9-month regular loan. Only one 6-month extension (at the option of the Secretary—not the producer) is allowed.
- Grain cannot be entered directly into the FOR. It must first be placed under a 9-month loan which must reach maturity before entry is allowed.

The new FOR is simpler and more closely aligned with market conditions. Farmers have more control over marketing of their FOR grain because they have the option of removing it at any time without penalty. Grain can remain in the reserve for a maximum of 27 to 33 months, which will eliminate the repeated extensions that often have kept FOR grain from moving into the market. The new FOR does not isolate wheat from the market as effectively as the old FOR, however, so its impact on prices are likely to be reduced.

The Decision To Open the FOR for 1990-Crop Wheat

The new FOR provisions of the 1990 Act required the Secretary to announce FOR decisions regarding 1990-crop wheat by December 15, 1990. According to the 1990 Farm Act, this decision must be based on an evaluation of two conditions. The Secretary **must** allow entry of wheat into the FOR when both conditions are met. The Secretary **may** allow entry if only one condition is met. The conditions are:

Price condition—The average market price for the 90 days preceding December 15 is less than 120 percent of the announced 1990 loan rate (i.e., 120 percent of $1.95, or $2.34);

Stocks-to-use (S/U) Condition—The projected stocks-to-use ratio at the end of the 1990 crop year (i.e. on May 31, 1991) is more than 37.5 percent.

Based on USDA supply and use estimates in early December 1990, USDA analysts estimated that the 1990 ending stocks-to-use ratio would be 39.6 percent. Hence, the S/U condition was met. The average 90-day market price of $2.44 was 10 cents above the price trigger, however, so the price condition was not met and the decision on whether to open the FOR became discretionary.

The Secretary decided to open the FOR for entry of 1990-crop wheat. According to the USDA impact analysis prepared to support the Secretary's decision, the FOR was opened for 1990-crop wheat:

> "... to support wheat prices and to give producers additional time to evaluate marketing opportunities. The conditions requiring FOR entry were almost met. If market prices had been 4 percent lower, the Secretary would have been required to open the FOR. The FOR helps support prices by reducing free stocks, which are projected to increase sharply by the end of the 1990-crop year."[7]

At the time the entry decision was announced, the Secretary also announced, as required by law, that the maximum FOR quantity would be set at 300 million bushels. USDA's analysis had predicted that producers would not want to place more than 300 million bushels into the FOR, so this level would not limit producers (7). There is no minimum FOR quantity specified in the 1990 Farm Act.

For 1990-crop wheat to be eligible for the FOR, it must have been placed under 9-month loan by January 31, 1991. Producers must also have indicated by that date if they intended to enter any 1990-crop wheat into the FOR (see further details below).

Estimated Quantity of 1990 Crop Wheat in the FOR

In December, 1990, USDA analysts estimated that 150 to 200 million bushels of 1990-crop wheat would be enrolled in the FOR (7). (The 200-million-bushel level was assumed for the analysis.) These estimates were based on the relationship between: (1) the projected market price and FOR loan rate, (2) projected total 9-month loan placements, and (3) historic FOR placement patterns. Historic FOR placement patterns were used as an indicator, despite the new FOR rules, because few other indicators were available.

Some aspects of the new FOR will encourage FOR placements — relative to the old FOR — while other aspects

[7] Free stocks are those stocks that are readily available to the market. In this article, free stocks are defined as total wheat stocks less the three categories of wheat in CCC inventory, under FOR loan, and under 9-month loan. Some analysts include wheat under 9-month and FOR loans in the free stocks category.

will discourage FOR placements. Compared to the old FOR rules, FOR placements under the new rules will likely increase because producers can redeem FOR loans at any time without penalty. On the other hand, FOR placements could be less than historic patterns would indicate because of the change in the timing of storage payments from annual (paid in advance) to quarterly (paid after the fact), and because the FOR loan rate is lower in absolute terms than the $3.30 to $4.00 FOR loan rates of the early 1980's.

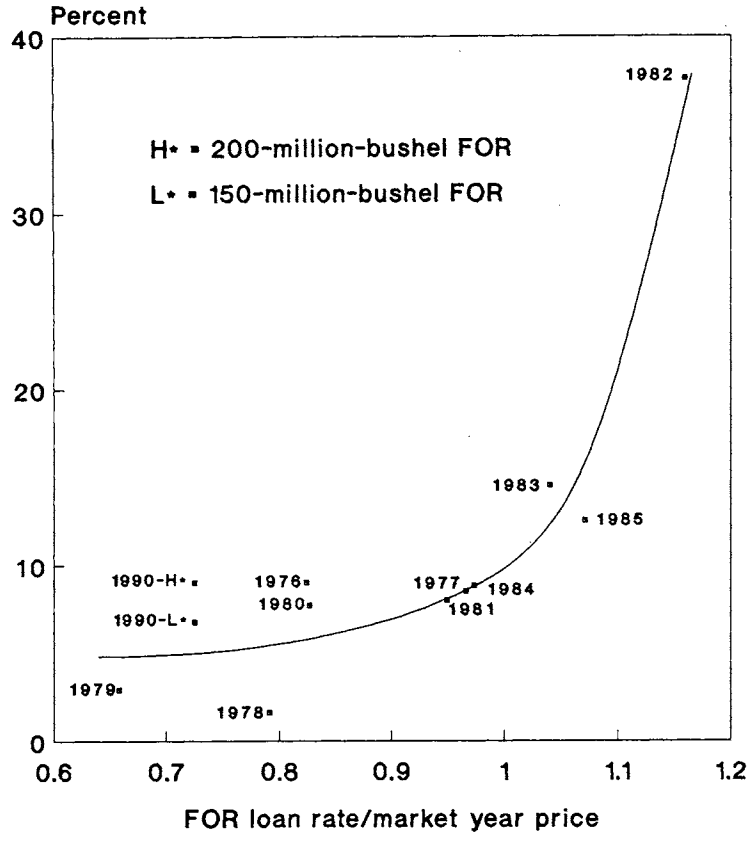
Figure A-1 shows a key relationship underlying the analysis. The vertical axis represents the percent of loan-eligible production that was enrolled in the FOR. Loan-eligible production is the quantity of wheat from a crop that is eligible to be placed under 9-month and FOR loan. In general, loan-eligible production equals the amount of wheat produced on farms participating in the wheat program. Loan eligible production varies from year to year. An estimated 2.2 billion bushels of 1990-crop wheat were eligible for 9-month loans.

The horizontal axis represents the ratio of the FOR loan rate and the actual market-year price for years prior to the 1990 marketing year. For the 1990 marketing year, the national average effective loan rate for the FOR is $1.92 and the market year price after FOR entry was estimated at $2.67 (see explanation of price estimates below).[8] This results in a ratio of 0.75. The price estimate was estimated based on USDA's November 1990 forecast price range for the 1990 marketing year.

The historical data shows the relationship that would be expected on the basis of relative returns. As the FOR loan rate becomes more attractive relative to the market price (a move to the right along the horizontal axis), the percentage of FOR-eligible wheat entered in the program increases (a move up the vertical axis). As indicated in figure A-1, the data point labeled 1990-L represents a

[8]The announced 1990-national average loan rate is $1.95. The effective loan rate of $1.92 reflects the 1.4 percent reduction in loan proceeds to producers mandated by Gramm-Rudman requirements for the 1990 fiscal year.]

Figure A-1
Loan-Eligible Wheat Production Entered Into FOR, 1977-1990



150-million-bushel FOR; the point labeled 1990-H represents a 200-million-bushel FOR.

The 150-million-bushel level (1990-L) is more in line with historical patterns. However, the 200-million-bushel level (1990-H) used in the impact analysis was viewed as a more likely level for several reasons.

First, analysts expected that relative placement increases caused by new FOR rules will outweigh relative decreases. This would suggest that the implied curve in figure A-1 would shift upward with a higher quantity entered in the FOR for a given loan rate/market year price ratio.

Second, the 1990 market year price on which the loan rate/market year price ratio is based is not comparable to the market year prices for most other years. Wheat prices during the 1990 marketing year have been highest during harvest and have consistently declined, following the price pattern most recently seen in 1976. If the 1990 price in the 1990 loan rate/price ratio is lowered to reflect an abnormal 1990 market year price, the 1990-H point moves to the right. At the same 200-million-bushel level, it almost exactly matches its "price-pattern-predecessor" year—1976. A lower 1990 price more accurately reflects the price that producers face as they decide whether to enter 1990-crop wheat in the FOR.

Third, little wheat or corn will be stored under the old FOR by summer. Producers have a substantial amount of storage available in which to store FOR grain.

Producers' Intentions To Enter 1990-Crop Wheat in the FOR

The 1990 Farm Act requires that producers from all regions must be given a fair opportunity to enter wheat into the FOR, regardless of the time of harvest. To meet this requirement, while guaranteeing that the 300-million-bushel maximum quantity was not exceeded, ASCS announced that a producer who wished to enter 1990-crop wheat into the FOR must file a FOR intentions report. This report, which must have been filed by January 31, 1991, states the quantity and class of wheat the producer intends to place in the FOR when his or her 9-month loan matures. A producer may enter less wheat in the FOR than stated in his or her intentions report, but not more.

If the sum of producers' 1990 intentions had exceeded the 300-million-bushel maximum, the quantity that individual producers would have been allowed to enter into the FOR would have been prorated by a national factor. Producers' intended FOR entries were 239 million bushels, however, so they will not have their FOR entries prorated (5).

The maximum quantity of 1990-crop wheat that can enter the FOR, then, is 239 million bushels. Actual placements will likely be less, but the amount will depend on market conditions when producers actually make their FOR entry decisions. If the USDA working estimate of 200 million bushels of wheat into the FOR is realized, producers would have entered 83 percent of their FOR intentions.

Timing of FOR Placements

USDA analysts expect only about 20 million bushels of 1990-crop wheat to enter the FOR during the 1990 marketing year (which ends May 31, 1991) because relatively few 9-month loans mature in time to be transferred to the FOR. This estimate also reflects a likely lag in ASCS's loan reporting system. The remaining 180 million bushels are expected to enter the FOR during the 1991 marketing year.

Wheat must be under 9-month loan until loan maturity before it can be entered in the FOR. A 9-month loan matures on the last day of the ninth month after the month during which the wheat was placed under loan. For example, wheat placed under loan on any day in July 1990 will mature on April 30, 1991. Wheat is transferred into the FOR on the day following loan maturity, i.e., the first day of the next month.

To enter the FOR during the 1990 marketing year, then, a 9-month loan must mature by April 30, 1991. A wheat loan that does not mature until May 31, 1991 (the last day of the 1990 marketing year), will not be recorded as entering the FOR until June 1 (the first day of the 1991 marketing year) or later. Wheat maturing on May 31, 1991, will be counted as under 9-month loan at the end of the 1990 marketing year even if it is transferred to the FOR on the next day.

ASCS's loan maturity schedule indicates that about 40 million bushels of wheat are under 9-month loans scheduled to mature by April 30, 1991. Perhaps half of these will be redeemed rather than entered into the FOR.

Table A-2--Effects of two FOR scenarios on wheat supply, use, and price

	1990		1991	
	Without FOR entry	With FOR entry	Without FOR entry	With FOR entry
	--Million bushels--			
Total supply	3,303	3,303	3,170	3,176
Total use	2,358	2,352	2,320	2,306
Ending stocks	945	951	850	870
CCC	150	150	150	150
FOR	0	20	0	160
9-month loan	75	225	77	73
Free stocks:				
Total-CCC	795	801	700	720
Total-CCC-FOR	795	781	700	560
Total-CCC-FOR-9 month	720	556	623	487
	--Dollars per bushel--			
Market year price	2.65	2.67	2.60	2.65
5-month price	2.72	2.72	2.50	2.55
Target price	4.00	4.00	4.00	4.00
Basic loan rate	2.44	2.44	2.53	2.53
Announced loan rate 1/	1.95	1.95	2.05	2.05

1/ The announced 1990 national average loan rate of $1.95 does not include Gramm-Rudman reductions. The effective loan rate, at $1.92, reflects the 1.4 percent reduction mandated by Gramm-Rudman requirements for the 1990 fiscal year.

Estimated Economic Effects

Supply, demand, price, wheat-sector income, and outlay estimates were developed under two scenarios. In scenario 1, 1990 wheat is not allowed to enter the FOR. This scenario is based on USDA's supply and use estimates from early December 1990.

In scenario 2, 1990 wheat is allowed to enter the FOR and producers enter 200 million bushels. Price impacts under this scenario represent subjective opinions of USDA analysts. Because FOR loans can now be repaid at any time, FOR stocks are less isolated and more free than under the old FOR. Consequently, estimated price impacts associated with the old FOR would not necessarily represent estimated price impacts associated with the new FOR.

Entry of 1990-crop wheat into the FOR will have an impact well beyond the 1990 marketing year. Most of the estimated FOR impact on supply, use, and prices will be during the 1991 and 1992 marketing years. These impacts, however, are not expected to be major in any year, primarily because free stocks, following FOR entry, will remain relatively high and because wheat may be redeemed from the FOR at any time

without penalty. Both of these factors would temper potential price impacts.

Impacts During the 1990 Crop Year

For the 1990 crop year, opening the FOR is expected to cause a slightly higher market year price—perhaps a 2-cent increase. Crop-year 1990 production was already determined by the time of the FOR announcement, and, as discussed above, too little wheat will enter the FOR during the crop year to have much direct impact on supply and use. Free stocks will be marginally tighter, however, and more wheat will remain under 9-month loan in anticipation of FOR entry during the 1991 marketing year.

The 1990 price impact is also influenced by the definition of "market year price." The market year price is the average of monthly prices received during the marketing year, weighted by monthly marketings during the year. By the time FOR entry was announced in December 1990, over half of the market year price had already been determined. Price impacts during the rest of the marketing year would only partially be reflected in the market year price.

Deficiency payments for the 1990-crop will not be affected because the 5-month price on which the 1990 regular deficiency payment rate was determined had been established before the FOR announcement.

Impacts During the 1991 Crop Year

Production for crop year 1991 and later years will probably be little affected by 1990 crop entry into the FOR. First, the change in producers' price expectations is expected to be small (especially given the uncertainty of the impacts of new FOR and planting flexibility rules). Second, for crop year 1991—the year of the largest expected price change—the 1991 winter wheat crop (typically 70 to 75 percent of wheat production) was already planted by the time USDA announced FOR entry of 1990-crop wheat.

Analysis done at the time of the FOR decision indicated that the market year price for crop year 1991 will likely be 5 cents higher with FOR entry because fewer free stocks will be available. These higher prices were assumed to reduce exports and feed and residual use by about 1 percent. After accounting for all impacts, total ending stocks were estimated to increase 2 to 3 percent for these years, despite tighter free stocks.

These expected market price increases were estimated to reduce deficiency payments for the 1991 crop by about $70 million. The decline in deficiency payments was estimated to be more than offset by a $110-million increase in the market value of production and by $40 million in government FOR storage payments. Thus, wheat sector income (including deficiency payments) was estimated to increase by $80 million from opening the 1990 FOR.

CCC Outlays, Fiscal Years 1991 to 1995

CCC outlays relating to the FOR will be spread over fiscal years 1991 through 1995. All 1990-crop FOR loans were estimated to have matured and been repaid by the end of the 1993 marketing year. Small estimated price increases in crop year 1992 and price decreases in crop years 1993 and 1994 (as a result of slightly higher total and free stocks) will first reduce, and then slightly increase, deficiency payments.

Changes in fiscal year CCC outlays occur in net loan activity, deficiency payments, and FOR storage payments. Fiscal year impacts are highest in 1991 when opening the FOR delays repayment of loans. Repayment of loans in later fiscal years offsets the higher initial loan outlays, while reductions in deficiency payments largely offset FOR storage payments. Thus, most of the approximately $300-million increase in fiscal year 1991 outlays will be either repaid or offset. Net CCC outlays over the 5-fiscal-year period (1991-95) were estimated to increase by only $30 million.

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Appendix table 1--Wheat classes: Estimated acreage, yield, and production, 1965-90

Year	Planted	Harvested	Yield	Production	Planted	Harvested	Yield	Production
	--1,000 acres--		Bushels per acre	1,000 bushels	--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	77,286	69,353	39.5	2,738,594	3,565	3,502	34.9	122,171
	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	56,998	49,976	40.7	2,033,299	16,723	15,875	36.7	583,124

Source: National Agricultural Statistics Service, USDA.

Appendix table 2--Wheat classes: Production, 1950-90

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	1,232.3	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	368.4	229.1	24.8	44.2	112.5
1986	2,090.6	1,017.8	451.4	292.5	211.2	20.8	32.4	97.9
1987	2,109.3	1,020.8	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	2,738.6	1,198.9	554.7	549.5	285.0	28.4	37.3	122.2

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, 1988-90 1/

State	Winter									Spring 2/					
	Hard red			Soft red			White			Hard red			White		
	1988	1989	1990	1988	1989	1990	1988	1989	1990	1988	1989	1990	1988	1989	1990
	Percent														
Alabama	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Arizona	100	100	100	--	--	--	--	--	--	--	--	--	--	--	--
Arkansas	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
California	93	91	93	--	--	--	7	9	7	--	--	--	--	--	--
Colorado	100	100	100	--	--	--	--	--	--	84	84	84	16	16	16
Delaware	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Florida	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Georgia	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Idaho	30	17	17	--	--	--	70	83	83	58	45	43	42	55	57
Illinois	2	2	2	98	98	98	--	--	--	--	--	--	--	--	--
Indiana	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Iowa	70	70	70	30	30	30	--	--	--	--	--	--	--	--	--
Kansas	100	99	98	--	1	2	--	--	--	--	--	--	--	--	--
Kentucky	3	6	6	97	94	94	--	--	--	--	--	--	--	--	--
Louisiana	2	2	2	98	98	98	--	--	--	--	--	--	--	--	--
Maryland	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Michigan	--	--	--	26	23	28	74	77	72	--	--	--	--	--	--
Minnesota	100	100	100	--	--	--	--	--	--	100	100	100	--	--	--
Mississippi	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Missouri	2	2	3	98	98	97	--	--	--	--	--	--	--	--	--
Montana	100	100	99	--	--	--	--	--	1	100	100	100	--	--	--
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	100	100	100	--	--	--	--	--	--	--	--	--	--	--	--
Oregon	2	1	1	--	--	--	98	99	99	15	15	25	85	85	75
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	10	10	5	--	--	--	90	90	95	50	25	35	50	75	65
West Virginia	--	--	--	100	100	100	--	--	--	--	--	--	--	--	--
Wisconsin	--	--	--	93	93	93	7	7	7	100	100	100	--	--	--
Wyoming	100	100	100	--	--	--	--	--	--	97	97	100	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, 1979-1991 1/

Year	Planted acreage	Harvested acreage	Yield	Production
	---Million acres---		Bu./acre	Million bushels
Hard red winter:				
1979	38.2	31.3	34.9	1,091.6
1980	40.7	35.8	33.0	1,181.3
1981	43.4	37.9	29.3	1,112.1
1982	43.2	37.0	33.6	1,243.6
1983	41.3	30.2	39.7	1,197.8
1984	43.6	34.1	36.7	1,250.6
1985	42.5	34.5	35.7	1,230.1
1986	39.4	31.5	32.3	1,017.8
1987	36.3	28.6	35.7	1,020.8
1988	34.4	26.8	32.9	881.9
1989	37.5	26.1	27.2	711.0
1990	38.3	32.9	36.5	1,198.9
1991	35.4	NA	NA	NA
Hard red spring:				
1979	14.2	14.0	26.3	368.8
1980	16.3	13.6	22.9	311.4
1981	16.1	15.8	29.4	463.8
1982	15.5	15.2	32.4	492.7
1983	11.1	10.7	30.2	322.7
1984	12.0	11.7	34.9	408.8
1985	14.0	13.1	35.1	460.2
1986	14.6	14.1	32.0	451.4
1987	13.3	13.0	33.1	430.6
1988	13.0	10.1	17.9	181.2
1989	16.5	15.9	27.3	433.5
1990	16.2	15.3	36.1	554.7
1991	13.5	NA	NA	NA
Durum:				
1979	4.0	3.9	27.4	106.7
1980	5.5	4.8	22.6	108.4
1981	5.8	5.7	32.1	183.0
1982	4.3	4.2	34.7	145.9
1983	2.6	2.5	29.2	73.0
1984	3.3	3.2	32.3	103.4
1985	3.2	3.1	36.3	112.5
1986	3.0	2.9	33.8	97.9
1987	3.3	3.3	28.1	92.6
1988	3.3	2.8	15.7	44.8
1989	3.8	3.7	25.1	92.2
1990	3.6	3.5	34.9	122.2
1991	3.6	NA	NA	NA
Soft red winter:				
1979	8.4	7.6	40.7	309.6
1980	11.7	10.6	41.7	441.8
1981	16.7	15.3	44.3	678.0
1982	17.2	15.8	37.3	588.9
1983	15.6	12.8	39.4	504.2
1984	14.5	12.6	42.2	531.4
1985	10.6	9.1	40.5	368.4
1986	10.1	7.7	38.0	292.5
1987	9.0	7.6	46.0	349.5
1988	10.9	9.6	49.2	472.7
1989	13.4	12.0	45.8	548.9
1990	14.1	12.7	43.4	549.5
1991	11.5	NA	NA	NA
White:				
1979	6.6	5.6	46.0	257.4
1980	6.6	6.3	53.7	338.0
1981	6.2	6.0	58.1	348.5
1982	6.0	5.7	51.6	294.0
1983	5.9	5.3	60.8	322.0
1984	5.8	5.3	56.7	300.6
1985	5.3	4.9	51.8	253.9
1986	4.9	4.5	51.6	232.0
1987	3.9	3.5	61.6	215.8
1988	4.0	3.8	61.0	231.6
1989	5.4	4.5	55.8	251.0
1990	5.2	5.0	63.1	313.4
1991	4.8	NA	NA	NA

NA = Not available.
1/ 1991 data based on winter wheat seedlings.

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

Appendix table 5--Wheat: Marketing year supply and disappearance, 1960/61-1990/91 1/

Year Beginning June 1	Supply				Disappearance						Ending stocks May 31		
					Domestic use								
	Beginning stocks	Production	Imports 2/	Total	Food	Seed	Feed 3/	Total	Exports 2/	Total disappearance	Govt. owned	Privately owned 4/	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	157.6	837.0	1,194.1	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	86.0	783.1	1,375.2	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	280.3	1,086.0	1,597.8	2,683.8	283.0	977.8	1,260.8
1988/89	1,260.8	1,812.2	22.6	3,095.7	714.5	103.0	157.4	974.9	1,419.2	2,394.1	190.5	511.1	701.6
1989/90	701.6	2,036.6	23.4	2,761.6	731.0	101.1	160.1	992.2	1,233.0	2,225.1	116.6	419.9	536.5
1990/91 5/	536.5	2738.6	35.0	3,310.1	765.0	88.0	450.0	1,303.0	1,025.0	2,328.0	170.0	812.1	982.1

NA = Not available.
1/ Total may not add because of rounding. 2/ Imports and exports include flour and other products expressed in wheat equivalent.
3/ Residual use 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, 1975/76-1990/91

Year and periods beginning June 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports 1/	Total	Food	Seed	Feed 2/	Total	Exports 1/	Total disappearance	Govt. owned	Privately owned 3/	Total
	Million bushels												
1975/76:													
June-Aug.	435.0	2,126.9	0.7	2,562.6	140.0	1.0	20.8	161.8	300.1	461.9	0.9	2,099.8	2,100.7
Sept.-Nov.	2,100.7	---	0.8	2,101.5	156.4	68.0	-47.8	176.6	376.6	553.2	0.3	1,548.0	1,548.3
Dec.-Feb.	1,548.3	---	0.3	1,548.6	144.8	2.0	52.8	199.6	263.5	463.1	0.2	1,085.3	1,085.5
Mar.-May	1,085.5	---	0.6	1,086.1	147.3	29.0	11.5	187.8	232.7	420.5	0.0	665.6	665.6
Mkt. year	435.0	2,126.9	2.4	2,564.3	588.5	100.0	37.3	725.8	1,172.9	1,898.7	0.0	665.6	665.6
1976/77:													
June-Aug.	665.6	2,148.8	0.8	2,815.2	150.0	1.0	-3	148.0	282.0	430.0	0.0	2,385.2	2,385.2
Sept.-Nov.	2,385.2	---	0.5	2,385.7	153.0	64.0	-2.8	214.2	277.3	491.5	0.0	1,894.2	1,894.2
Dec.-Feb.	1,894.2	---	0.4	1,894.6	144.8	1.0	45	190.8	178.9	369.7	0.2	1,524.7	1,524.9
Mar.-May	1,524.9	---	1.0	1,525.9	140.2	26.0	35.2	201.4	211.3	412.7	0.0	1,113.2	1,113.2
Mkt. year	665.6	2,148.8	2.7	2,817.1	588.0	92.0	74.4	754.4	949.5	1,703.9	0.0	1,113.2	1,113.2
1977/78:													
June-Aug.	1,113.2	2,045.5	0.7	3,159.4	142.7	1.0	117.1	260.8	266.9	527.7	7.8	2,623.9	2,631.7
Sept.-Nov.	2,631.7	---	0.5	2,632.2	154.3	54.0	37	245.3	247.5	492.8	29.0	2,110.4	2,139.4
Dec.-Feb.	2,139.4	---	0.4	2,139.8	143.7	1.0	28.3	173.0	260.2	433.2	39.1	1,667.5	1,706.6
Mar.-May	1,706.6	---	0.3	1,706.9	145.8	24.0	10.1	179.9	349.2	529.1	48.3	1,129.5	1,177.8
Mkt. year	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:													
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

See footnotes at end of table.

Continued--

Appendix table 6--Wheat: Quarterly supply and disappearance, 1975/76-1990/91--Continued

Year and periods beginning June 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports 1/	Total	Food	Seed	Feed 2/	Total	Exports 1/	Total disappearance	Govt. owned	Privately owned 3/	Total
	Million bushels												
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
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	2.9	200.5	467.3	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	280.3	1,086.0	1,597.8	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	168.9	3.0	-40.6	131.3	360.5	491.9	203.2	1,024.5	1,227.7
Mar.-May	1,227.7	---	4.1	1,231.8	165.0	32.0	-34.8	162.2	368.0	530.2	190.5	511.1	701.6
Mkt. year	1,260.8	1,812.2	22.6	3,095.7	714.5	103.0	157.4	974.9	1,419.2	2,394.1	190.5	511.1	701.6
1989/90:													
June-Aug.	701.6	2,036.6	5.9	2,744.1	183.1	1.7	271.4	456.2	369.9	826.1	167.9	1,750.1	1,918.0
Sept.-Nov.	1,918.0	---	5.3	1,923.4	183.1	68.4	-79.2	172.3	328.6	500.9	154.5	1,268.0	1,422.5
Dec.-Feb.	1,422.5	---	4.7	1,427.2	180.5	2.7	41.2	224.4	259.7	484.1	136.5	806.6	943.1
Mar.-May	943.1	---	7.5	950.6	184.3	28.3	-73.2	139.4	274.8	414.1	116.6	419.9	536.5
Mkt. year	701.6	2,036.6	23.4	2,761.6	731.0	101.1	160.1	992.2	1,233.0	2,225.1	116.6	419.9	536.5
1990/91: 4/													
June-Aug.	536.5	2,738.6	8.0	3,283.0	197.4	1.6	406.4	605.4	268.1	873.5	104.6	2,304.9	2,409.5
Sept.-Nov.	2,409.5	---	13.4	2,422.9	211.9	60.5	-37.0	235.4	278.0	513.4	129.9	1,779.6	1,909.5
Dec.-Feb.													
Mar.-May													
Mkt. year	536.5	2,738.6	35.0	3,310.1	765.0	88.0	450.0	1,303.0	1,025.0	2,328.0	170.0	812.1	982.1

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

Appendix table 7--Wheat: Farm prices, support prices, and ending stocks, 1950/51-1991/92

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	50	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 *8/	170	20	792	982	2.55-2.65	1.95	4.00	1.28
1991/92 *8/	NA	NA	NA	NA	NA	2.04	4.00	8/ 1.47

--- = Not applicable.
NA = Not available.
* Includes Food Security Reserve. 1/ Farmer-owned reserve. 2/ Total may 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/ Projected, winter wheat option 1.40.

Appendix table 8--Wheat: Status of price support loans on specified dates, 1965/66-1990/91

Crop year	Total stocks	Total CCC inventory	Outstanding CCC loans	Farmer-owned reserve 1/	Unencumbered stocks
			Million bushels		
1965/66:					
Dec. 1	1,704.0	626.4	177.0	0.0	900.6
Mar. 1	1,336.0	571.8	181.2	0.0	583.0
1966/67:					
Jun. 1	917.3	449.9	133.8	0.0	333.6
Sept.1	660.5	420.4	96.5	0.0	143.6
Dec. 1	1,434.2	300.1	134.4	0.0	999.7
Mar. 1	1,047.5	215.6	153.1	0.0	678.8
1967/68:					
Jun. 1	699.2	147.0	129.2	0.0	423.0
Sept.1	512.8	137.2	86.3	0.0	289.3
Dec. 1	1,556.2	115.4	201.8	0.0	1,239.0
Mar. 1	1,209.7	109.0	252.5	0.0	848.2
1968/69:					
Jun. 1	838.1	103.6	239.3	0.0	495.2
Sept.1	630.2	103.6	227.2	0.0	299.4
Dec. 1	1,679.3	101.7	472.7	0.0	1,104.9
Mar. 1	1,341.4	100.4	536.2	0.0	704.8
1969/70:					
Jun. 1	1,109.5	98.8	553.7	0.0	457.0
Sept.1	904.0	143.3	493.6	0.0	267.1
Dec. 1	1,872.4	166.2	725.9	0.0	980.3
Mar. 1	1,532.8	168.8	705.5	0.0	658.5
1970/71:					
Jun. 1	1,197.2	167.6	654.5	0.0	375.1
Sept.1	982.6	289.6	620.0	0.0	73.0
Dec. 1	1,788.5	296.9	534.1	0.0	957.5
Mar. 1	1,410.0	282.9	477.0	0.0	650.1
1971/72:					
Jun. 1	1,060.4	259.8	403.1	0.0	397.5
Sept.1	882.8	358.6	282.8	0.0	241.4
Dec. 1	1,873.8	376.9	425.9	0.0	1,071.0
Mar. 1	1,547.6	369.2	485.9	0.0	692.5
1972/73:					
Jun. 1	1,210.7	363.6	457.4	0.0	389.7
Sept.1	983.4	366.1	428.3	0.0	189.0
Dec. 1	1,870.9	294.5	367.8	0.0	1,208.6
Mar. 1	1,399.0	267.3	304.9	0.0	826.8
1973/74:					
Jun. 1	927.3	222.0	204.8	0.0	500.5
Sept.1	597.1	212.6	125.7	0.0	258.8
Dec. 1	1,451.6	139.7	49.4	0.0	1,262.5
Mar. 1	928.3	139.1	32.2	0.0	757.0
1974/75:					
Jun. 1	548.1	135.8	1.1	0.0	411.2
Sept.1	340.1	133.0	0.4	0.0	206.7
Dec. 1	1,562.1	17.3	24.9	0.0	1,519.9
Mar. 1	1,107.5	15.6	20.7	0.0	1,071.2
1975/76:					
Jun. 1	662.1	13.0	14.1	0.0	635.0
Sept.1	2,100.7	0.9	13.6	0.0	2,086.2
Dec. 1	1,548.3	0.3	19.9	0.0	1,528.1
Mar. 1	1,085.5	0.2	31.5	0.0	1,053.8
1976/77:					
Jun. 1	665.6	0.2	21.4	0.0	644.0
Sept.1	2,385.2	0.0	32.9	0.0	2,352.3
Dec. 1	1,894.2	0.0	151.4	0.0	1,742.8
Mar. 1	1,524.9	0.2	285.5	0.0	1,239.2
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

See footnote at end of table.

Continued--

Appendix table 8--Wheat: Status of price support loans on specified dates, 1965/66-1990/91--Continued

Crop year	Total stocks	Total CCC inventory	Outstanding CCC loans	Farmer-owned reserve 1/	Unencumbered stocks
			Million bushels		
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	2,409.5	104.6	120.3	118.8	2,065.8
Dec. 1	1,909.5	129.9	260.9	64.6	1,454.1
Mar. 1					

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, 1973/74-1990/91 1/

Year beginning June 1	Supply			Disappearance			Ending stocks May 31
	Beginning stocks	Pro-duction	Total 2/	Domestic use	Exports	Total	
	Million bushels						
1973/74:							
Hard winter	285	961	1,246	301	775	1,076	170
Hard spring	212	328	541	209	245	454	87
Soft red	25	161	186	136	27	163	23
White	30	182	213	61	125	186	27
Durum	45	79	125	47	45	92	33
All classes	597	1,711	2,311	754	1,217	1,971	340
1974/75:							
Hard winter	170	883	1,053	318	510	828	225
Hard spring	87	293	382	148	130	278	104
Soft red	23	273	296	123	136	259	37
White	27	252	280	42	195	237	43
Durum	33	81	114	41	47	88	26
All classes	340	1,782	2,125	672	1,018	1,690	435
1975/76:							
Hard winter	225	1,055	1,280	323	581	904	376
Hard spring	104	327	432	156	160	316	116
Soft red	37	331	368	142	165	307	61
White	43	291	334	59	215	274	60
Durum	26	123	150	45	52	97	53
All classes	435	2,127	2,564	725	1,173	1,898	666
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

See footnotes at end of table.

Continued--

Appendix table 9--Wheat classes: Marketing year supply and disappearance, 1973/74-1990/91 1/--Continued

Year beginning June 1	Supply			Disappearance			Ending stocks May 31
	Beginning stocks	Pro-duction	Total 2/	Domestic use	Exports	Total	
	Million bushels						
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	3,939	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	173	183	357	371
Soft red	74	531	605	289	252	541	64
White	167	301	469	86	210	296	173
Durum	99	103	206	45	61	105	100
All classes	1,399	2,595	4,002	1,157	1,421	2,578	1,425
1985/86:							
Hard winter	717	1,230	1,947	545	393	938	1,009
Hard spring	371	460	841	178	165	343	498
Soft red	64	367	431	204	148	352	79
White	173	254	428	80	150	230	198
Durum	100	113	216	42	53	95	121
All classes	1,425	2,424	3,864	1,049	909	1,959	1,905
1986/87:							
Hard winter	1,009	1,017	2,026	624	429	1,053	973
Hard spring	498	451	957	268	199	466	490
Soft red	79	292	371	180	114	294	77
White	198	232	437	77	175	252	185
Durum	121	98	225	49	82	132	95
All classes	1,905	2,091	4,017	1,198	999	2,196	1,821
1987/88 :							
Hard winter	973	1,019	1,992	514	911	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	1,086	1,598	2,684	1,261
1988/89:							
Hard winter	567	882	1,449	507	639	1,146	302
Hard spring	402	181	590	176	195	371	219
Soft red	75	473	547	193	315	508	39
White	135	232	370	40	250	290	81
Durum	83	45	139	59	20	79	60
All classes	1,261	1,812	3,096	975	1,419	2,394	702
1989/90 :							
Hard winter	302	711	1,013	438	360	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	992	1,233	2,225	536
1990/91: 3/							
Hard winter	215	1,199	1,414	610	335	945	469
Hard spring	155	555	722	264	200	464	258
Soft red	32	549	581	280	225	505	76
White	85	313	407	89	215	304	103
Durum	50	122	186	60	50	110	76
All classes	536	2,739	3,310	1,303	1,025	2,328	982

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, 1973/74-1990/91 1/

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total
						Thousand 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	127,165	141,828	115,899	91,579	1,347,393
1989/90	90,808	137,971	131,989	150,700	89,343	68,664	81,816	78,345	87,655	104,914	84,611	71,649	1,178,466
1990/91	88,274	80,840	92,682	105,985	83,883	77,265	56,444						
						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	10,776	2,463	2,520	60,743
1988/89	7,036	6,400	6,002	2,402	7,908	3,368	6,086	4,178	6,515	6,841	6,540	5,214	68,490
1989/90	907	1,897	5,775	8,915	3,579	6,817	3,606	4,943	3,124	4,466	6,132	3,289	53,450
1990/91	1,139	2,244	2,785	2,865	3,390	3,508	4,480						

See footnotes at end of table.

Continued--

Appendix table 10--U.S. wheat exports: Grain, flour, and products, by month, 1973/74-1990/91 1/--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total
						Thousand 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	564	20	20	59	30	25	3,328
1989/90	31	33	457	74	463	72	78	44	44	50	45	32	1,422
1990/91	50	41	65	464	533	104	61						
						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	160,472	156,426	150,437	1,597,829
1988/89	129,299	118,322	114,013	130,455	101,735	96,831	106,798	120,044	133,700	148,727	122,469	96,818	1,419,211
1989/90	91,747	139,901	138,221	159,688	93,385	75,553	85,499	83,331	90,822	109,430	90,788	74,970	1,233,335
1990/91	89,462	83,125	95,533	109,315	87,806	80,877	60,985						

1/ Totals may 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, 1983/84-1990/91 1/

Crop year	June	July	August	September	October	November	December	January	February	March	April	May	Total
						Thousand 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	2,465	2,835	3,284	2,261	2,586	1,419	1,111	1,311	1,240	1,569	1,660	927	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						
Flour and Products	741	1,393	905	935	784	762	1,278						
Total	1,846	2,234	3,918	4,803	4,560	4,027	3,965						

1/ Totals may not add because of rounding.

Appendix table 12--World wheat production, consumption, trade, and ending stocks, 1960/61-1990/91

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	1.18	238.4	234.8	41.9	81.8	34.8
1961/62	203.4	1.10	224.8	236.4	46.8	70.2	29.7
1962/63	206.9	1.22	251.8	245.8	44.3	75.8	30.8
1963/64	206.3	1.13	233.9	239.4	56.0	70.3	29.4
1964/65	215.9	1.25	270.4	262.3	52.0	78.5	29.9
1965/66	215.5	1.22	263.3	281.1	61.0	60.7	21.6
1966/67	213.6	1.44	306.7	279.8	56.0	87.6	31.3
1967/68	219.2	1.36	297.6	287.5	51.0	97.7	34.0
1968/69	223.9	1.48	330.8	307.2	45.0	121.3	39.5
1969/70	217.8	1.42	310.0	327.8	50.0	103.5	31.6
1970/71	207.0	1.52	313.7	336.7	55.0	80.5	23.9
1971/72	212.8	1.65	350.9	342.2	52.0	89.2	26.1
1972/73	210.9	1.63	343.4	357.7	67.0	74.9	20.9
1973/74	217.1	1.72	373.1	365.3	63.0	82.7	22.6
1974/75	220.0	1.64	360.1	361.5	64.3	81.4	22.5
1975/76	225.3	1.58	356.5	351.2	66.7	86.6	24.7
1976/77	233.1	1.81	421.4	380.8	63.3	127.2	33.4
1977/78	227.2	1.69	384.1	402.4	72.8	108.9	27.1
1978/79	229.0	1.95	446.9	421.2	72.0	134.6	31.9
1979/80	228.3	1.86	424.5	438.3	86.0	120.7	27.5
1980/81	236.8	1.87	443.0	450.9	94.1	113.2	25.1
1981/82	238.4	1.88	449.3	449.5	101.3	113.1	25.2
1982/83	237.3	2.01	477.3	460.2	98.7	130.2	28.3
1983/84	228.9	2.14	489.3	474.0	102.0	145.5	30.7
1984/85	231.2	2.21	511.9	493.0	107.0	164.4	33.3
1985/86	229.6	2.18	500.1	496.2	85.0	168.2	33.9
1986/87	228.2	2.33	530.7	522.5	90.7	176.4	33.8
1987/88	220.0	2.28	502.3	530.2	105.0	148.5	28.0
1988/89	218.0	2.30	500.4	531.9	96.8	117.0	22.0
1989/90 3/	225.6	2.38	536.8	534.7	96.1	119.1	22.3
1990/91 4/	230.8	2.55	589.0	562.9	93.9	145.3	25.8

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 13--Wheat production, trade, and ending stocks, world and United States, 1965-90

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	9,675	1,283	13.26	2,241	852	38.01	2,232	660	29.57
1966	11,270	1,315	11.67	2,058	771	37.47	3,220	513	15.93
1967	10,935	1,507	13.78	1,874	765	40.82	3,589	630	17.56
1968	12,157	1,557	12.81	1,653	544	32.90	4,457	904	20.28
1969	11,390	1,443	12.67	1,837	603	32.82	3,805	983	25.84
1970	11,525	1,352	11.73	2,021	741	36.67	2,959	823	27.81
1971	12,895	1,619	12.55	1,911	599	31.37	3,279	985	30.04
1972	12,618	1,546	12.25	2,462	1,116	45.35	2,753	597	21.68
1973	13,711	1,711	12.48	2,315	1,217	52.57	3,040	340	11.18
1974	13,232	1,782	13.47	2,363	1,018	43.11	2,989	435	14.55
1975	13,100	2,127	16.24	2,451	1,173	47.86	3,183	666	20.92
1976	15,483	2,149	13.88	2,326	950	40.85	4,674	1,113	23.81
1977	14,114	2,046	14.50	2,675	1,124	42.02	4,002	1,178	29.43
1978	16,419	1,776	10.82	2,646	1,194	45.14	4,944	924	18.69
1979	15,597	2,134	13.68	3,160	1,375	43.51	4,436	902	20.33
1980	16,278	2,381	14.63	3,458	1,514	43.79	4,161	989	23.77
1981	16,510	2,785	16.87	3,722	1,771	47.58	4,156	1,159	27.89
1982	17,538	2,765	15.77	3,627	1,509	41.61	4,786	1,515	31.66
1983	17,977	2,420	13.46	3,748	1,429	38.13	5,345	1,399	26.17
1984	18,810	2,595	13.79	3,932	1,424	36.22	6,039	1,425	23.60
1985	18,375	2,424	13.19	3,123	909	29.11	6,181	1,905	30.82
1986	19,498	2,091	10.72	3,333	998	29.95	6,481	1,821	28.10
1987	18,458	2,108	11.42	3,858	1,598	41.42	5,456	1,261	23.11
1988	18,386	1,812	9.86	3,557	1,419	39.90	4,298	702	16.33
1989	19,725	2,037	10.33	3,531	1,233	34.92	4,377	536	12.24
1990 2/	21,644	2,739	12.66	3,450	1,025	29.71	5,338	982	18.40

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

Appendix table 14--Wheat: Production and exports, major foreign exporters, and total foreign, 1966-90

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	1,386	205	9,955	1,375
1967	277	208	593	336	269	81	1,624	269	9,428	1,203
1968	544	234	650	306	211	92	1,631	339	10,600	1,303
1969	387	296	671	346	258	85	1,562	383	9,947	1,448
1970	290	336	332	435	181	36	1,517	214	10,173	1,334
1971	316	286	530	504	209	60	1,776	331	11,276	1,461
1972	242	157	533	577	254	117	1,778	444	11,071	1,515
1973	440	258	594	419	241	58	1,752	433	12,000	1,465
1974	417	315	489	395	219	66	1,938	452	11,450	1,496
1975	440	318	628	450	315	116	1,657	533	10,973	1,545
1976	434	349	867	494	404	217	1,711	402	13,334	1,652
1977	344	298	730	588	209	65	1,635	465	12,068	1,651
1978	665	430	777	480	298	150	2,033	564	14,643	1,893
1979	595	485	631	584	298	175	1,954	655	13,463	2,053
1980	399	352	709	598	286	141	2,261	796	13,897	2,046
1981	601	404	911	678	305	134	2,135	821	13,725	2,190
1982	326	267	982	785	551	363	2,376	805	14,773	2,423
1983	809	490	972	800	468	288	2,344	821	15,557	2,612
1984	686	539	779	645	485	346	3,055	1,043	16,215	2,832
1985	594	589	891	650	312	158	2,632	1,020	15,951	2,622
1986	592	575	1,153	764	328	163	2,647	1,030	17,408	2,746
1987	454	362	953	864	323	136	2,625	1,042	16,350	2,664
1988	517	418	588	456	309	148	2,744	1,197	16,574	2,621
1989	519	395	903	638	373	217	2,877	1,168	17,689	2,703
1990 3/	577	404	1,168	643	412	228	2,963	1,167	18,905	2,824

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 15--Wheat and wheat flour: World trade, production, stocks, and use, 1984/85-1990/91 1/

Country or region	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91 7/
	Million metric tons						
Exports:							
Canada	19.4	16.8	20.8	23.6	13.5	17.0	17.5
Australia	15.8	16.0	14.8	12.2	10.8	10.9	10.5
Argentina	8.0	6.1	4.3	3.8	3.5	5.6	6.6
EC-12	18.5	15.6	16.4	14.8	21.0	21.0	21.0
USSR	0.5	0.5	0.5	0.5	0.5	0.5	1.0
All others	6.7	4.9	5.5	6.7	9.9	7.7	9.8
Total non-U.S.	68.9	60.0	62.3	61.6	59.2	62.6	66.4
U.S. 2/	38.1	25.0	28.4	43.4	37.6	33.5	27.5
World total	107.0	85.0	90.7	105.0	96.8	96.1	93.9
Imports:							
EC-12	3.4	2.8	2.4	2.2	2.5	2.5	3.5
USSR	28.1	15.7	16.0	21.5	15.5	14.0	13.0
Japan	5.6	5.5	5.8	5.7	5.4	5.6	5.6
E. Europe	2.6	3.4	3.7	3.3	2.6	2.1	2.6
China	7.4	6.6	8.5	15.0	15.5	13.0	10.5
All others	59.9	50.9	54.3	57.4	55.3	59.0	58.7
World total	107.0	85.0	90.7	105.0	96.8	96.1	93.9
Production: 3/							
Canada	21.2	24.3	31.4	26.0	16.0	24.6	31.8
Australia	18.7	16.2	16.1	12.4	14.1	14.1	15.7
Argentina	13.2	8.5	8.9	8.8	8.4	10.2	11.2
EC-12	83.1	71.6	72.0	71.4	74.7	78.3	80.6
USSR 3/	68.6	78.1	92.3	83.3	84.4	92.3	108.0
E. Europe	42.1	37.1	39.2	39.9	44.8	44.3	44.7
China	87.8	85.8	90.0	85.8	85.4	90.8	96.5
India	45.5	44.1	47.1	44.3	46.2	54.1	49.7
All other foreign	61.1	68.4	76.7	73.1	77.1	72.7	76.3
U.S.	70.6	66.0	56.9	57.4	49.3	55.4	74.5
World total	511.9	500.1	530.7	502.3	500.4	536.8	589.0
Utilization: 4/							
U.S.	31.4	28.6	32.6	29.6	26.5	27.0	35.5
USSR 5/	91.2	91.6	102.8	101.5	100.4	103.3	118.0
China	92.2	100.4	101.5	102.8	104.4	104.5	105.1
All other foreign	278.2	275.6	285.4	296.3	300.6	299.9	304.3
World total	493.0	496.2	522.5	530.2	531.9	534.7	562.9
Stocks, ending: 6/	164.4	168.2	176.4	148.5	117.0	119.1	145.3

1/ July-June years. 2/ Includes transshipments through Canadian ports; excludes products other than flour. 3/ Production data include all harvests occurring within the July-June year shown, except that small grain crops from the early harvesting Northern Hemisphere areas are moved forward; i.e., the May 1984 harvests in areas such as India, North Africa, and southern United States are actually included in 1984/85 accounting period, which begins July 1, 1984. 4/ 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. 5/ "Bunker weight" basis; not discounted for excess moisture and foreign material. 6/ 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. Stocks data are not available for all countries and exclude part of Eastern Europe; the world stock levels have been adjusted for estimated year-to-year changes in USSR grain stocks, but do not purport to include the entire absolute level of USSR stocks. 7/ Forecasted as of February 11, 1991.

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

Appendix table 16--Wheat farm prices for leading classes in U.S. regions, 1977/78-1990/91 1/

Crop year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average	Loan rate
							$/bushel							
							Central and So. Plains (hard winter) 2/							
1977/78	1.94	1.98	1.94	2.06	2.19	2.37	2.38	2.37	2.44	2.55	2.69	2.69	2.30	2.19
1978/79	2.72	2.71	2.74	2.82	2.96	2.98	2.97	2.93	2.96	2.97	3.00	3.12	2.91	2.28
1979/80	3.63	3.81	3.72	3.82	3.86	3.93	3.89	3.81	3.73	3.51	3.36	3.48	3.71	2.43
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	3.89	4.04	4.03	4.01	3.74	2.21
1989/90	3.84	3.80	3.74	3.76	3.79	3.81	3.87	3.82	3.63	3.50	3.53	3.30	3.70	2.04
1990/91	3.02	2.75	2.53	2.45	2.40	2.34	2.37	2.28						
							Corn Belt (soft red winter) 3/							
1977/78	1.99	1.97	1.88	1.88	2.01	2.35	2.45	2.45	2.48	2.64	2.88	2.89	2.32	2.26
1978/79	2.88	2.90	3.02	3.08	3.23	3.34	3.37	3.37	3.50	3.38	3.44	3.58	3.26	2.34
1979/80	3.85	4.01	3.86	3.93	4.00	3.87	3.99	4.03	4.11	3.82	3.59	3.62	3.89	2.48
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	4.02	4.12	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	3.59	3.52	3.81	2.14
1990/91	3.04	2.85	2.66	2.45	2.40	2.34	2.42	2.35						
							Northern Plains (spring) 4/							
1977/78	2.25	2.16	2.16	2.28	2.45	2.59	2.56	2.60	2.62	2.66	2.81	2.84	2.50	2.26
1978/79	2.79	2.69	2.71	2.78	2.87	2.93	2.86	2.75	2.83	2.84	2.89	3.14	2.84	2.36
1979/80	3.49	3.69	3.62	3.67	3.83	3.76	3.61	3.54	3.60	3.57	3.66	3.80	3.65	2.51
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	2.56	2.40
1987/88	2.50	2.36	2.37	2.55	2.62	2.65	2.70	2.76	2.77	2.74	2.78	2.98	2.65	2.28
1988/89	3.30	3.62	3.67	3.79	3.83	3.74	3.81	3.92	3.94	3.99	3.96	3.98	3.80	2.21
1989/90	3.89	3.80	3.66	3.59	3.60	3.58	3.62	3.58	3.50	3.47	3.49	3.49	3.61	2.06
1990/91	3.34	2.96	2.57	2.45	2.43	2.39	2.43	2.36						
							Pacific Northwest (white) 5/							
1977/78	2.47	2.52	2.55	2.45	2.40	2.58	2.62	2.69	2.92	3.07	3.17	3.22	2.72	2.31
1978/79	3.23	3.29	3.35	3.36	3.30	3.30	3.34	3.30	3.21	3.22	3.30	3.42	3.30	2.41
1979/80	3.98	3.93	4.12	4.03	3.91	3.89	3.74	3.68	3.80	3.71	3.66	3.56	3.83	2.57
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	4.49	4.37	4.41	4.31	4.14	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	2.47	2.47	2.51	2.45						
							U.S. average 6/							
1977/78	2.03	2.04	2.13	2.16	2.30	2.46	2.47	2.53	2.59	2.67	2.82	2.82	2.33	2.25
1978/79	2.81	2.81	2.88	2.92	2.99	3.04	3.01	2.99	2.99	2.97	3.01	3.20	2.98	2.35
1979/80	3.72	3.89	3.74	3.87	3.98	3.94	3.81	3.74	3.78	3.64	3.58	3.69	6/ 3.80	2.50
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	3.33	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	2.44	2.32	2.36	2.53	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	2.42	2.39	2.40	2.32					7/ 2.55-2.65	1.95

1/ January 1991 data is 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 17--Wheat cash prices for leading classes at major markets, 1951/52-1990/91

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)							
1951/52	2.35	2.32	2.33	2.37	2.44	2.53	2.54	2.52	2.50	2.50	2.49	2.45	2.45
1952/53	2.27	2.23	2.31	2.38	2.39	2.43	2.42	2.39	2.36	2.37	2.36	2.31	2.35
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	2.33	2.24	2.19
1956/57	2.12	2.07	2.17	2.26	2.28	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	1.73	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	3.74
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	2.83	2.81	2.78	2.78	2.71					
						KANSAS CITY, NO. 1 HARD RED WINTER (13 % PROTEIN)							
1951/52	2.37	2.36	2.37	2.41	2.47	2.54	2.52	2.53	2.50	2.51	2.50	2.47	2.46
1952/53	2.37	2.30	2.35	2.44	2.47	2.49	2.46	2.42	2.39	2.43	2.41	2.35	2.41
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	4.24	4.31	4.34	4.27	4.12	4.02	4.07	3.91	4.21
1990/91	3.71	3.17	2.94	2.89	2.86	2.84	2.89	2.83					

Continued--

Appendix table 17--Wheat cash prices for leading classes at major markets, 1951/52-1990/91--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
						$/bushel							
						CHICAGO, NO. 2 SOFT RED WINTER							
1951/52	2.37	2.34	2.40	2.41	2.46	2.57	2.63	2.57	2.54	2.54	2.49	2.44	2.48
1952/53	2.33	2.23	2.28	2.31	2.30	2.31	2.30	2.29	2.26	2.27	2.20	2.13	2.27
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	3.56
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					
						ST. LOUIS, NO. 2 SOFT RED WINTER							
1951/52	2.33	2.31	2.37	2.40	2.48	2.57	2.65	2.60	2.58	2.56	2.49	2.41	2.48
1952/53	2.27	2.20	2.25	2.30	2.33	2.34	2.34	2.38	2.35	2.34	2.26	2.15	2.29
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	3.58	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	3.97	4.03	4.05	4.20	4.19	4.13	4.00	3.87	3.88	3.33	3.96
1990/91	3.27	3.02	2.85	2.66	2.57	2.65	2.71	2.61					

Continued--

Appendix table 17--Wheat cash prices for leading classes at major markets, 1951/52-1990/91--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
						$/bushel							
						TOLEDO, NO. 2 SOFT RED WINTER							
1951/52	2.23	2.21	2.32	2.35	2.39	2.48	2.58	2.55	2.51	2.49	2.44	2.35	2.41
1952/53	2.14	2.06	2.11	2.15	2.13	2.17	2.21	2.18	2.15	2.17	2.11	2.08	2.14
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	4.36
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					
						TOLEDO, NO. 2 SOFT WHITE							
1951/52	2.23	2.21	2.32	2.35	2.39	2.48	2.58	2.55	2.47	2.47	2.41	2.36	2.40
1952/53	2.15	2.08	2.13	2.13	2.12	2.19	2.24	2.16	2.13	2.15	2.08	2.05	2.13
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	3.92	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					

Continued--

Appendix table 17--Wheat cash prices for leading classes at major markets, 1951/52-1990/91--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
						$/bushel							
						PORTLAND, NO. 1 SOFT WHITE							
1951/52	2.27	2.27	2.29	2.36	2.42	2.44	2.46	2.49	2.52	2.54	2.51	2.48	2.42
1952/53	2.49	2.35	2.37	2.36	2.37	2.41	2.41	2.41	2.44	2.45	2.45	2.39	2.41
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	2.19	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	2.12
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	3.35	3.25	3.02	2.94	2.78	2.88	2.98	2.95	2.96	2.93	3.10
1977/78	2.79	2.88	2.88	2.80	2.75	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	4.72	4.74	4.63	4.44	4.11	3.76	3.68	3.61	4.31
1990/91	3.59	3.44	3.21	3.10	2.87	2.86	2.89	2.92					
						MINNEAPOLIS, NO. 1 DARK NO. SPRING (ORDINARY PROTEIN) 1/							
1951/52	2.35	2.31	2.33	2.33	2.41	2.50	2.51	2.47	2.44	2.45	2.42	2.42	2.41
1952/53	2.42	2.38	2.37	2.39	2.40	2.41	2.40	2.40	2.38	2.40	2.41	2.40	2.40
1953/54	2.34	2.24	2.20	2.30	2.33	2.40	2.39	2.38	2.40	2.41	2.37	2.32	2.34
1954/55	2.28	2.35	2.40	2.53	2.53	2.48	2.52	2.54	2.53	2.56	2.48	2.52	2.48
1955/56	2.49	2.41	2.28	2.39	2.41	2.39	2.33	2.32	2.34	2.32	2.37	2.32	2.36
1956/57	2.29	2.35	2.37	2.28	2.29	2.35	2.34	2.34	2.33	2.31	2.30	2.24	2.32
1957/58	2.25	2.29	2.25	2.27	2.32	2.34	2.31	2.30	2.31	2.32	2.35	2.38	2.31
1958/59	2.43	2.35	2.03	2.05	2.08	2.07	2.07	2.06	2.08	2.06	2.07	2.10	2.12
1959/60	2.11	2.13	2.12	2.13	2.16	2.20	2.18	2.17	2.17	2.18	2.19	2.21	2.16
1960/61	2.21	2.17	2.06	2.06	2.09	2.09	2.10	2.11	2.11	2.10	2.12	2.14	2.11
1961/62	2.23	2.27	2.23	2.26	2.27	2.29	2.33	2.34	2.34	2.34	2.35	2.35	2.30
1962/63	2.33	2.34	2.30	2.30	2.34	2.36	2.33	2.32	2.33	2.34	2.37	2.33	2.33
1963/64	2.40	2.23	2.14	2.27	2.34	2.32	2.31	2.30	2.26	2.19	2.21	2.31	2.27
1964/65	2.03	1.65	1.68	1.75	1.75	1.78	1.77	1.78	1.78	1.76	1.74	1.75	1.77
1965/66	1.72	1.77	1.68	1.74	1.73	1.74	1.74	1.75	1.75	1.72	1.74	1.77	1.74
1966/67	1.90	2.00	2.02	2.04	1.95	1.93	1.93	1.89	1.88	1.94	1.92	1.96	1.95
1967/68	1.92	1.91	1.75	1.67	1.65	1.63	1.60	1.61	1.61	1.64	1.62	1.58	1.68
1968/69	1.55	1.45	1.43	1.51	1.57	1.59	1.57	1.58	1.56	1.57	1.56	1.54	1.54
1969/70	1.53	1.53	1.51	1.59	1.65	1.70	1.72	1.73	1.70	1.67	1.72	1.68	1.64
1970/71	1.70	1.72	1.75	1.85	1.88	1.86	1.80	1.75	1.70	1.65	1.65	1.63	1.75
1971/72	1.62	1.57	1.50	1.50	1.51	1.55	1.57	1.56	1.54	1.54	1.52	1.53	1.54
1972/73	1.50	1.57	1.72	1.92	2.02	2.08	2.32	2.38	2.22	2.28	2.33	2.47	2.07
1973/74	2.67	2.99	4.36	4.47	4.37	4.47	4.99	5.52	5.80	5.23	4.16	3.97	4.42
1974/75	4.51	4.76	4.65	4.62	5.25	5.42	5.06	4.39	4.12	4.05	4.03	3.96	4.57
1975/76	3.73	3.93	4.23	4.12	3.94	3.51	3.50	3.55	3.66	3.62	3.47	3.56	3.74
1976/77	3.82	3.63	3.14	2.95	2.79	2.71	2.70	2.79	2.87	2.82	2.75	2.59	2.96
1977/78	2.43	2.29	2.22	2.51	2.61	2.71	2.68	2.73	2.72	2.86	3.08	3.10	2.66
1978/79	3.06	2.95	2.96	3.07	3.21	3.22	3.15	3.12	3.12	3.18	3.29	3.62	3.16
1979/80	4.23	4.31	4.10	4.18	4.31	4.27	4.18	4.06	4.13	4.04	3.94	4.21	4.16
1980/81	4.19	4.54	4.22	4.17	4.62	4.78	4.62	4.65	4.53	4.32	4.41	4.44	4.46
1981/82	4.29	4.18	4.03	4.07	4.22	4.29	4.15	4.21	4.17	4.10	4.21	4.16	4.17
1982/83	4.08	4.08	3.78	3.79	3.78	3.85	3.76	3.80	3.82	4.01	4.34	4.25	3.95
1983/84	4.15	4.07	4.21	4.30	4.33	4.23	4.20	4.15	4.06	4.20	4.28	4.39	4.21
1984/85	4.40	4.21	3.72	3.57	3.64	3.64	3.48	3.47	3.52	3.55	3.64	3.55	3.70
1985/86	3.54	3.29	2.87	2.97	3.01	3.42	3.45	3.38	3.32	3.33	3.42	3.05	3.25
1986/87	2.51	2.17	2.39	2.64	2.70	2.81	2.77	2.82	2.65	2.61	2.60	2.76	2.62
1987/88	2.66	2.52	2.60	2.74	2.85	2.81	2.96	3.12	3.26	3.05	3.19	3.30	2.92
1988/89	4.17	3.96	4.09	4.16	4.17	4.09	4.20	4.42	4.37	4.46	4.45	4.50	4.25
1989/90	4.29	4.21	4.22	4.23	NA	NA	NA	NA	NA	NA	NA	NA	4.24
1990/91	NA	NA	NA	NA	NA	NA	NA	NA					

Continued--

Appendix table 17--Wheat cash prices for leading classes at major markets, 1951/52-1990/91--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
							$/bushel						
						MINNEAPOLIS, DARK NO. 1 SPRING (13% PROTEIN)							
1951/52	2.37	2.34	2.36	2.37	2.44	2.53	2.53	2.50	2.46	2.48	2.44	2.44	2.44
1952/53	2.46	2.45	2.41	2.41	2.44	2.47	2.46	2.43	2.44	2.48	2.48	2.48	2.45
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					
						MINNEAPOLIS, DARK NO. 1 SPRING (15% PROTEIN)							
1951/52	2.54	2.62	2.50	2.46	2.53	2.59	2.56	2.54	2.51	2.53	2.50	2.48	2.53
1952/53	2.49	2.54	2.48	2.48	2.51	2.54	2.52	2.49	2.49	2.51	2.52	2.52	2.51
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	4.56	4.64	5.03
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	4.11	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					

Continued--

Appendix table 17--Wheat cash prices for leading classes at major markets, 1951/52-1990/91--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
						$/bushel							
						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	4.11	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					
						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	3.60	3.68	3.78	3.89	3.93	4.03	3.57
1987/88	3.91	3.66	3.80	4.30	4.31	4.33	4.22	4.19	4.22	4.02	4.21	4.39	4.13
1988/89	6.13	6.30	5.85	5.84	5.70	5.56	5.17	5.20	5.33	5.30	5.02	5.01	5.53
1989/90	4.64	4.50	4.33	4.08	4.12	4.08	4.20	4.23	4.12	4.13	4.30	4.31	4.25
1990/91	4.08	3.73	3.41	3.27	3.34	3.24	3.37	3.49					

NA = Not available.
1/ Series to be discontinued starting May 1991 issue due to nonavailability of data.

Source: Grain and Feed Market News, Agricultural Marketing Service, USDA.

Appendix table 18--Domestic and foreign wheat prices, 1980-90

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:							
1980	143	159	176	213	203	192	176
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	99	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	109	126	137	164	107	158	8/ 149
1986:							
January	117	122	133	178	108	189	140
February	116	121	131	176	102	183	133
March	121	123	136	164	97	189	139
April	124	127	138	172	96	187	137
May	111	125	128	163	90	185	131
June	91	102	107	135	85	169	114
July	83	91	103	128	81	160	104
August	83	91	104	124	80	137	104
September	84	93	104	127	81	133	105
October	85	96	105	131	80	130	108
November	89	98	107	137	79	133	111
December	91	99	109	137	78	133	110
1987:							
January	93	100	110	141	82	136	110
February	95	103	114	145	92	138	112
March	94	107	116	140	90	139	115
April	97	107	115	138	88	134	115
May	98	111	120	146	88	136	119
June	90	100	110	144	86	130	111
July	85	95	106	134	84	126	107
August	87	97	108	134	84	124	109
September	93	103	114	139	89	130	115
October	96	105	116	139	95	134	118
November	99	105	116	140	95	134	118
December	99	114	126	148	95	142	126
1988:							
January	101	118	130	158	94	148	127
February	103	120	132	155	106	151	135
March	101	114	126	149	107	143	131
April	103	115	128	156	108	145	133
May	109	118	130	159	107	152	131
June	124	140	151	191	125	166	158
July	129	139	151	200	141	209	157
August	133	139	151	193	140	206	154
September	137	148	160	190	152	202	160
October	141	152	162	190	147	202	169
November	143	154	165	185	152	202	171
December	145	156	167	189	NQ	206	173
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	175
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	126
November	88	101	114	144	74	126	129
December	87	102	114	150	74	132	130

NQ = No quotes.
1/ All wheat, U.S. season average. 2/ No.1, hard winter, ordinary protein. 3/ No. 2, hard 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/ January to October average.

Appendix table 19--Wheat flour: Supply and disappearance, United States, 1960-90

Calendar year	Wheat ground	Millfeed production	Flour production	Flour and product imports 2/	Total supply	Exports		Domestic disappearance	Total population July 1	Per capita disappearance
						Flour	Products 2/			
	1,000 bushells	1,000 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	110
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	114
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	115
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	20,927	86	263,861	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	283,966	1,166	285,132	18,655	84	266,393	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	675,271	5,426	299,832	2,005	301,837	19,933	160	281,744	236.3	119
1985	700,151	5,556	313,815	2,064	315,879	18,387	141	297,351	238.5	125
1986	737,537	5,799	326,316	2,226	328,542	25,842	123	302,577	240.7	126
1987	767,507	6,260	341,565	2,632	344,197	28,529	142	315,526	242.8	130
1988	769,699	6,163	344,154	2,696	346,850	28,169	182	318,499	245.1	130
1989	731,338	5,828	328,500	3,303	331,803	26,357	182	305,264	247.4	123
1990 3/	795,593	6,128	352,843	3,572	356,415	18,380	273	337,762	249.9	135

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). 3/ Preliminary.

Appendix table 20--Wheat production costs, United States, 1981-91

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 Prelim.	1991 Forecast
						$/planted acre					
Gross value of production (excluding direct government payments): 1/											
Wheat	114.35	110.32	128.52	113.97	93.52	66.06	76.21	95.89	99.83	NA	NA
Wheat straw	4.61	4.37	4.45	4.48	2.48	2.06	2.18	3.78	3.45	NA	NA
Total, gross value of production	118.96	114.69	132.97	118.45	96.00	68.12	78.39	99.67	103.28	NA	NA
Cash expenses: 1/											
Seed	7.19	6.65	6.37	6.48	7.59	7.29	6.62	6.69	8.12	8.12	8.46
Fertilizer	17.26	16.93	17.69	17.75	15.09	12.93	11.75	14.09	15.56	15.53	16.31
Lime and gypsum	0.35	0.63	0.67	0.62	0.82	1.60	1.32	1.25	1.30	1.30	1.36
Chemicals	2.41	3.16	3.27	3.19	4.26	4.06	3.82	3.82	4.00	4.15	4.29
Custom operations	4.41	5.74	5.90	5.93	3.98	3.94	3.95	3.73	3.53	3.71	3.87
Fuel, lube, and electricity	12.33	11.77	11.06	9.54	9.93	6.74	7.56	7.37	7.99	8.88	9.57
Repairs	7.80	7.18	7.77	7.49	6.56	6.17	6.32	6.41	7.09	7.29	7.62
Hired Labor 2/	NA	NA	0.83	0.81	2.43	2.54	2.53	2.59	2.76	2.92	3.06
Purchased irrigation water	0.30	0.32	0.33	0.34	0.25	0.22	0.20	0.20	0.22	0.23	0.24
Miscellaneous	0.11	0.37	0.38	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Technical services	0.13	0.12	0.12	0.11	0.19	0.18	0.17	0.16	0.16	0.17	0.18
Total, variable expenses	52.29	52.88	54.39	55.01	51.10	45.67	44.24	46.31	50.73	52.30	54.96
General farm overhead	7.39	7.11	8.05	8.62	5.10	4.69	6.01	6.89	9.02	9.67	10.09
Taxes and insurance	7.39	6.90	7.69	7.86	7.44	7.92	8.11	8.19	8.91	9.14	9.43
Interest	19.81	18.45	21.86	22.98	12.69	9.08	10.09	9.57	12.49	12.03	12.09
Total, fixed expenses	34.59	32.46	37.60	39.46	25.23	21.69	24.21	24.65	30.42	30.84	31.61
Total, cash expenses	86.88	85.34	91.99	94.47	76.33	67.36	68.45	70.96	81.15	83.14	86.57
Gross value of production	32.08	29.35	40.98	26.34	19.67	0.76	9.94	28.71	22.13	NA	NA
Capital replacement	19.30	19.41	21.02	20.48	19.63	19.90	20.33	20.67	23.48	24.21	24.91
Gross value of production less cash expenses and replacement	12.78	9.94	19.96	5.86	0.04	-19.14	-10.39	8.04	-1.35	NA	NA
Economic (full ownership) costs:1/											
Variable expenses	52.29	52.88	54.39	55.01	51.10	45.67	44.24	46.31	50.73	52.30	54.96
General farm overhead	7.39	7.11	8.05	8.62	5.10	4.69	6.01	6.89	9.02	9.67	10.09
Taxes and insurance	7.39	6.90	7.69	7.86	7.44	7.92	8.11	8.19	8.91	9.14	9.43
Capital replacement	19.30	19.41	21.02	20.48	19.63	19.90	20.33	20.67	23.48	24.21	24.91
Allocated returns to owned inputs:	50.09	49.52	53.93	43.35	41.99	34.00	35.65	43.26	45.24	43.59	43.75
Operating capital	3.91	3.09	2.51	2.72	2.11	1.38	1.46	1.78	2.28	2.21	2.20
Other nonland capital	7.07	6.94	7.49	3.84	3.67	3.66	3.69	4.33	5.36	5.53	5.69
Land	29.44	29.75	34.41	29.78	30.81	23.30	24.87	31.38	31.47	29.47	29.16
Labor (paid and unpaid) 2/	9.67	9.74	9.52	7.01	5.40	5.66	5.63	5.77	6.13	6.38	6.70
Total, economic (full ownership) costs	136.46	135.82	145.08	135.31	125.26	112.18	114.34	125.32	137.38	138.91	143.14
Residual returns to management and risk 1/	-17.5	-21.13	-12.11	-16.84	-29.26	-44.06	-35.95	-25.65	-34.10	NA	NA
Harvest-period price ($/bu.)	3.63	3.38	3.48	3.37	2.98	2.29	2.39	3.50	3.81	NA	NA
Yield (bu./planted acre)	31.47	32.64	36.89	33.79	31.41	28.79	31.87	27.42	26.22	NA	NA

NA = Not available.
Totals may not add because of rounding. 1/ Methods and procedure used for estimating various components of gross value of production, expenses, economic costs, and returns are outlined in "Economic Indicators of the Farm Sector: Cost-of-Production, Major Field Crops, 1989". Agriculture and Rural Economic Research Service, USDA, Coordinator Robert Dismukes. 2/ Hired labor (a cash expense) and unpaid labor separately identified beginning in 1983.

Appendix table 21--On-farm receipts of major crops, United States, 1982-89 1/

Receipts 2/	1982	1983	1984	1985	1986	1987	1988	1989
				Billion dollars				
Food grains	11.4	9.7	9.7	9.0	5.7	5.8	7.5	8.1
Wheat	9.9	8.8	8.6	7.9	5.0	5.0	6.4	7.2
Rice	1.5	0.9	1.1	1.0	0.7	0.7	1.1	0.9
Feed grains and hay	17.4	15.5	15.7	22.5	17.2	14.6	15.3	16.5
Corn	12.8	10.9	10.9	16.9	12.3	9.9	9.0	11.1
Oats	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2
Barley	0.8	1.0	1.1	1.0	0.8	0.8	0.9	0.7
Sorghum	1.5	1.2	1.5	2.0	1.3	1.1	1.1	1.1
Hay	2.0	2.2	2.4	2.4	2.2	2.5	3.1	3.4
Oil crops	13.8	13.5	13.6	12.5	10.6	11.3	13.5	12.2
Soybeans	12.5	12.2	12.0	11.2	9.2	10.0	12.2	10.8
Peanuts	0.8	0.8	1.2	1.0	1.1	1.0	1.1	1.1
Other oil crops	0.5	0.5	0.4	0.3	0.3	0.1	0.2	0.3
Cotton (incl. seed)	4.5	3.7	3.7	3.7	3.4	4.2	4.5	4.7
Tobacco	3.3	2.8	2.8	2.7	1.9	1.8	2.0	2.4
Fruits and nuts	6.8	6.1	6.7	6.9	7.2	8.1	9.1	9.0
Vegetables	8.1	8.5	9.2	8.6	8.8	9.9	9.8	11.3
Other crops 3/	7.0	7.4	8.0	8.3	9.0	10.1	10.7	11.1
Total crops	72.3	67.2	69.9	74.3	63.7	65.6	71.4	75.4

1/ Includes net Commodity Credit Corporation loans. 2/ Calendar year. 3/ Includes sugar, seed, greenhouse, nursery, and other miscellaneous crops.

Appendix table 22--Wheat base acres and Conservation Reserve Program by state, 1986-89

State	All acres of wheat base	Signup 1	2	3	4	5	6	7	8	9	Total wheat base (CRP) retired	All (CRP) enrollment
	1,000 acres	Acres										
Alabama	591	7,707	11,247	17,552	33,210	9,335	12,650	4,880	4,487	3,283	104,353	519,530
Alaska	NA	0	0	0	23	0	0	1	0	0	24	24,701
Arizona	222	0	0	0	0	0	0	0	0	0	0	0
Arkansas	1,689	2,567	6,686	8,302	11,951	7,223	10,725	5,186	4,734	7,595	64,970	225,354
California	1,190	2,590	7,557	4,656	3,865	2,148	1,262	880	687	382	24,026	183,054
Colorado	4,074	35,459	175,307	201,260	149,217	71,246	38,777	33,489	37,480	60,843	803,077	1,953,042
Connecticut	NA	0	0	0	0	0	0	0	0	0	0	10
Delaware	48	0	0	0	47	0	9	17	6	1	79	984
Florida	131	707	1,668	2,148	2,866	2,334	3,177	1,527	1,180	725	16,331	123,013
Georgia	1,210	7,445	12,113	22,040	29,911	17,679	49,603	15,842	11,704	12,811	179,148	663,156
Hawaii	NA	0	0	0	0	0	0	0	0	0	0	85
Idaho	1,947	2,953	30,850	77,073	68,069	19,802	14,092	14,680	11,970	14,895	254,384	791,061
Illinois	1,824	4,413	7,302	12,480	22,432	12,300	11,841	14,666	12,633	14,773	112,841	633,580
Indiana	1,042	580	2,112	5,098	9,818	6,180	4,952	7,382	6,869	7,780	50,772	364,729
Iowa	144	1,824	4,129	6,533	11,530	3,007	2,404	2,050	2,722	2,891	37,090	1,970,158
Kansas	14,219	14,479	72,721	157,845	330,031	244,227	139,234	73,875	74,406	158,906	1,265,724	2,861,786
Kentucky	591	5,160	7,655	16,960	22,655	10,497	6,674	5,390	2,598	3,971	81,558	416,799
Louisiana	383	519	1,601	1,525	3,578	1,209	2,777	814	1,497	2,744	16,263	132,907
Maine	NA	0	1	16	46	14	31	0	15	1	124	37,222
Maryland	131	10	29	33	177	118	229	266	127	598	1,587	16,059
Massachusetts	NA	0	0	0	0	0	0	0	0	0	0	32
Michigan	852	368	922	1,901	3,627	4,053	3,315	3,181	1,833	2,879	22,079	196,305
Minnesota	3,900	11,863	32,049	61,200	120,481	56,395	31,093	31,840	23,642	22,152	390,716	1,830,672
Mississippi	900	8,628	14,870	14,726	44,340	13,766	12,554	6,079	8,937	13,536	137,434	726,898
Missouri	2,795	13,650	33,668	43,292	129,301	71,531	37,078	17,082	12,085	12,866	370,552	1,504,413
Montana	7,280	5,284	33,250	74,069	272,323	188,517	108,525	110,642	84,041	111,061	987,710	2,720,133
Nebraska	3,250	5,628	23,723	38,832	84,674	38,963	34,526	30,505	18,698	36,929	312,478	1,348,930
Nevada	30	0	0	0	0	0	143	80	0	2	226	3,124
New Jersey	34	0	0	0	0	24	11	0	0	13	48	661
New Mexico	806	14,635	105,837	88,402	18,793	3,738	712	2,489	3,207	1,720	239,533	480,765
New York	175	107	365	331	370	660	317	305	171	102	2,727	54,606
N. Carolina	665	401	1,736	2,873	5,647	4,049	3,843	1,939	1,116	1,632	23,236	137,040
N. Dakota	13,095	3,415	17,581	36,940	131,847	212,567	170,549	161,916	159,225	229,179	1,123,219	3,137,199
Ohio	1,283	491	1,270	2,893	6,815	4,066	2,757	4,865	3,667	7,166	33,989	254,130
Oklahoma	7,841	12,335	62,118	160,547	168,623	97,405	57,443	48,424	32,061	57,656	696,612	1,155,450
Oregon	1,472	7,339	63,279	124,156	68,163	8,987	6,443	2,827	2,292	4,222	287,708	517,150
Pennsylvania	145	144	575	517	531	592	753	750	589	580	5,030	92,465
S. Carolina	552	1,900	4,607	12,367	13,467	6,069	10,263	4,758	4,788	3,668	61,886	265,513
S. Dakota	5,055	2,870	11,799	38,042	51,124	84,510	80,754	72,440	110,893	165,301	617,732	2,084,557
Tennessee	755	5,838	9,686	17,886	20,923	10,880	7,881	4,782	5,664	4,730	88,270	429,352
Texas	7,687	5,647	83,303	242,350	353,983	183,652	130,779	92,407	81,640	91,889	1,265,650	3,921,378
Utah	334	2,661	16,392	39,825	21,636	7,605	3,133	3,342	365	1,522	96,481	232,318
Vermont	NA	0	0	0	0	0	0	0	0	0	0	187
Virginia	309	266	789	1,018	1,611	1,798	1,851	1,371	1,053	1,680	11,437	73,939
Washington	3,150	10,612	34,413	74,027	120,713	34,630	18,721	11,548	17,945	48,083	370,691	975,320
W. Virginia	9	5	0	0	5	2	12	0	0	0	24	610
Wisconsin	183	276	559	1,865	2,237	2,748	1,834	1,007	975	2,172	13,673	604,060
Wyoming	382	1,114	4,802	22,516	36,460	16,742	5,119	2,825	3,705	11,055	104,338	257,022
U.S. total	92,375	201,894	898,567	1,634,094	2,377,121	1,461,263	1,028,843	798,346	751,707	1,123,988	10,275,824	33,921,459

NA = Not available.

Appendix table 23--Wheat: Supply and disappearance, United States, 1910/11-1990/91

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	1,113.7	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	1,086.0	1,597.8	1,260.8	2.57	47.0
1988/89	53.2	34.1	1,812.2	974.9	1,419.2	701.6	3.72	29.3
1989/90 3/	62.2	32.7	2,036.6	992.2	1,233.0	536.5	3.72	24.1
1990/91 4/	69.4	39.5	2,738.6	1,303.0	1,025.0	982.1	2.55-2.65	42.2

1/ 1910/1911-1949/50 - July-June marketing year; 1950/51-1988/89 - June-May marketing year. 2/ 1941/42-1949/50-includes procurement for both civilian relief feeding and military food use. 3/ Estimated. 4/ Projected.

Appendix table 24--Quarterly government stock activity for wheat, 1988/89-1990/91

	1988/89				1989/90				1990/91	
	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	117.0	108.1	93.1	46.9	19.2	48.2	80.4	65.4	30.0	120.3
Loans made	60.1	34.2	10.8	1.7	42.6	47.1	17.8	4.2	113.0	164.2
Certificate exchange	5.8	0.7	0.5	0.2	0.0	0.1	0.1	0.0	0.1	0.3
Cash redemption	118.2	47.1	55.2	23.1	13.5	14.8	32.7	39.2	22.6	23.3
CCC collateral acquired	5.0	1.4	1.3	6.1	0.1	0.0	0.0	0.4	0.0	0.0
Reserve conversion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Carryout outstanding	108.1	93.1	46.9	19.2	48.2	80.4	65.4	30.0	120.3	260.9
FOR loans:										
Carryin FOR	466.8	391.0	383.4	377.9	287.0	211.4	173.6	153.6	143.9	118.8
Reserve conversion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash redemption	0.0	0.5	1.8	68.4	39.6	8.7	3.7	0.0	0.5	1.8
CCC collateral acquired	23.2	3.4	1.8	2.9	24.1	23.2	10.9	3.1	13.7	33.2
Certificate exchange	52.6	3.7	1.9	19.6	11.9	5.9	5.4	6.6	10.9	19.2
Carryout FOR	391.0	383.4	377.9	287.0	211.4	173.6	153.6	143.9	118.8	64.6
CCC owned:										
Carryin CCC	283.0	250.0	213.0	203.2	190.5	167.9	154.5	136.5	116.6	104.6
CCC collateral acquired	28.2	4.8	3.1	9.0	24.2	23.2	10.9	3.5	13.7	33.2
Certificate exchange	20.2	23.6	9.0	6.6	3.5	42.9	13.5	3.7	1.5	1.0
Other 1/	41.0	18.2	3.9	15.1	43.3	(6.3)	15.4	19.7	24.2	6.9
Carryout CCC	250.0	213.0	203.2	190.5	167.9	154.5	136.5	116.6	104.6	129.9

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

Appendix table 25--Rye: Supply, disappearance, area, and price, 1982/83-1990/91

Item	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90 1/	1990/91 2/
				Million acres					
Area:									
Planted	2,533	2,707	2,971	2,543	2,334	2,428	2,374	2,014	1,625
Harvested	677	892	979	708	661	671	595	484	373
				Bushels per acre					
Yield/harvested acre	28.8	30.3	33.1	28.8	28.8	29.1	24.7	28.2	27.1
				Million bushels					
Supply:									
Beginning stocks	3.0	5.8	11.2	19.8	21.9	18.6	18.9	10.3	5.6
Production	19.5	27.0	32.4	20.4	19.1	19.5	14.7	13.6	10.1
Imports	3.0	1.6	0.6	2.2	1.0	1.2	0.2	0.0	1.5
Total supply	25.5	34.4	44.2	42.4	41.9	39.3	33.8	24.0	17.2
Disappearance:									
Food	3.3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Feed and residual	9.6	11.9	14.4	10.9	13.7	10.6	11.4	9.0	5.2
Seed	4.3	4.7	4.1	3.8	3.7	3.8	3.2	3.0	3.0
Industry	2.3	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0
Total domestic	19.5	22.2	24.0	20.3	22.9	19.9	20.1	17.5	13.7
Exports	0.2	1.0	0.4	0.2	0.5	0.5	3.4	0.8	0.5
Total disappearance	19.7	23.2	24.4	20.5	23.4	20.4	23.5	18.3	14.2
Ending stocks	5.8	11.2	19.8	21.9	18.6	18.9	10.3	5.6	3.0
				$/bushel					
Prices:									
Loan rate	2.17	2.25	2.17	2.17	1.63	1.55	1.50	1.40	1.33
Season average price	2.40	2.17	2.08	2.03	1.49	1.63	2.52	2.10	2.10
				$1,000					
Value of production	47,460	60,074	68,828	41,902	29,159	31,641	37,006	28,099	21,158

1/ Preliminary. 2/ Projected.

Appendix table 26--Rye: Production by major states, 1982-90

State	1982	1983	1984	1985	1986	1987	1988	1989	1990
				1,000 bushels					
Georgia	1,470	1,470	1,760	2,070	1,785	1,540	1,890	1,610	1,320
Indiana	260	270	336	308	280	162	210	204	124
Michigan	522	600	588	651	713	640	650	825	580
Minnesota	3,300	4,960	6,650	3,300	1,600	1,200	920	1,088	868
Nebraska	1,269	1,265	1,392	1,242	1,035	1,150	1,375	600	750
N. Jersey	319	390	261	320	310	232	310	182	144
N. York	341	416	429	420	429	300	396	480	260
N. Carolina	525	440	550	665	595	600	780	525	345
N. Dakota	2,400	4,320	5,400	2,640	4,250	5,115	1,350	1,064	780
Oklahoma	736	780	704	828	840	360	720	532	342
Pennsylvania	408	578	578	740	630	525	684	576	496
S. Carolina	621	320	546	532	391	528	720	644	594
S. Dakota	4,680	8,740	10,800	4,440	4,440	5,040	2,250	3,240	1,870
Virginia	364	312	378	312	364	435	560	264	256

Appendix table 27--Wheat: Marketing year supply, disappearance, area, and price, 1982/83-1990/91

Item	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90 (prel.)	1990/91 (proj.)
				Million acres					
Area									
Planted	86.2	76.4	79.2	75.6	72.1	65.8	65.5	76.6	77.3
Harvested	77.9	61.4	66.9	64.7	60.7	55.9	53.2	62.2	69.4
Set aside and diverted	5.8	29.8	18.3	18.8	21.0	23.9	22.4	9.6	6.9
Conservation Reserve	---	---	---	---	0.6	4.2	6.9	8.8	3/ 10.3
National base acreage	90.7	90.9	94.0	94.0	92.2	91.8	91.7	90.7	90.1
				Bushels per acre					
Yield/harvested acre	35.5	39.4	38.8	37.5	34.4	37.7	34.1	32.7	39.5
				Million bushels					
Supply									
June 1 stocks	1,159	1,515	1,399	1,425	1,905	1,821	1,261	702	536
Production	2,765	2,420	2,595	2,424	2,091	2,108	1,812	2,037	2,739
Imports 1/	8	4	9	16	21	16	23	23	35
Total supply	3,932	3,939	4,003	3,865	4,017	3,945	3,096	2,762	3,310
Disappearance									
Food	616	642	651	674	712	721	715	731	765
Seed	97	100	98	93	84	85	103	101	88
Feed and residual 2/	195	369	408	284	401	280	157	160	450
Total domestic	908	1,111	1,157	1,051	1,197	1,086	975	992	1,303
Exports 1/	1,509	1,429	1,421	909	999	1,598	1,419	1,233	1,025
Total disappearance	2,417	2,540	2,578	1,960	2,196	2,684	2,394	2,225	2,328
May 31 stocks	1,515	1,399	1,425	1,905	1,821	1,261	702	536	982
Prices				$/bushel					
Received by farmers	3.45	3.51	3.39	3.08	2.42	2.57	3.72	3.72	2.55-2.65
Loan rate	3.55	3.65	3.30	3.30	2.40	2.28	2.21	2.06	1.95
Target	4.05	4.30	4.38	4.38	4.38	4.38	4.23	4.10	4.00
				$ million					
Value of production	9,813	8,533	8,757	7,374	5,044	5,497	6,684	7,542	7,299

-- = Not applicable.
1/ Imports and exports include flour and other products expressed in wheat equivalent. 2/ Residual use approximates feed use and includes negligible quantities used for alcoholic beverages.

Appendix table 28--Wheat: Production by major states, 1982-90

State	1982	1983	1984	1985	1986	1987	1988	1989	1990
				Million bushels					
Arkansas	72.2	58.5	61.6	18.2	33.4	34.4	56.7	52.8	49.0
Colorado	85.0	122.1	115.0	139.3 *	96.4	97.4	79.5	62.1	87.0
Idaho	94.8	91.7	81.4	72.0	81.8	85.5	75.5	91.4	99.6
Illinois	67.5	64.4	70.4	36.8	36.1	56.1	67.5	105.0 *	91.2
Kansas	458.5	448.2	431.2	433.2	336.6	366.3	323.0	213.6	472.0 *
Minnesota	126.8	79.0	120.7	142.4 *	103.7	102.6	51.7	102.5	138.6
Missouri	74.8	70.3	84.1	49.9	18.8	35.4	76.0	87.0	76.0
Montana	180.3	136.9	104.7	50.2	138.5	151.2	60.0	145.0	145.9
Nebraska	101.5	98.9	81.0	89.7	76.0	85.8	72.0	55.4	85.5
N. Dakota	324.8	194.1	284.2	323.3	292.3	269.1	103.4	242.3	385.2
Oklahoma	227.7 *	150.5	190.8	165.0	150.8	129.6	172.8	153.9	201.6
Oregon	63.5	65.6	68.9	56.0	58.4	52.9	51.8	53.8	57.6
S. Dakota	98.5	89.7	126.0	111.2	108.7	106.7	38.0	83.1	128.0 *
Texas	144.0	161.0	150.0	187.2 *	120.0	100.8	89.6	60.0	130.2
Washington	138.9	172.6 *	160.4	128.3	116.9	114.3	124.6	110.6	150.1

* Record production.

Appendix table 29--New crop wheat factor estimates, 1986-90 1/

Class	Factor									
	Dockage	Protein 2/	Moisture	Test weight	Foreign material	Damaged kernels	Shrunken & broken	Total defects 3/	Contrasting classes	Wheat of other classes
	Percent									
Soft red winter:										
1986	0.68	9.88	13.47	58.25	0.19	1.32	0.83	2.19	0.60	1.47
1987	0.84	NA	13.32	58.06	0.33	1.05	0.97	2.30	NA	NA
1988	0.98	NA	12.19	59.57	0.23	0.83	1.25	2.33	NA	2.00
1989	0.92	10.08	13.43	56.84	0.17	3.08	0.72	3.28	0.00	0.80
1990	1.00	10.40	13.40	56.90	0.20	2.80	1.20	3.30	NA	NA
Hard red winter:										
1986	0.97	11.86	11.05	60.39	0.34	0.27	2.02	2.51	1.66	3.79
1987	0.80	11.70	10.90	60.51	0.28	0.39	1.85	2.48	2.00	NA
1988	0.83	11.89	9.89	61.09	0.24	0.28	1.95	2.65	1.90	4.00
1989	0.89	12.52	10.65	61.14	0.38	1.78	1.44	2.62	0.70	1.80
1990	0.80	12.20	10.20	60.70	0.20	0.30	1.90	2.50	NA	NA
Hard red spring:										
1986	1.07	14.39	11.49	60.04	0.15	0.78	1.24	1.78	1.27	3.77
1987	1.09	13.90	11.48	60.07	0.19	1.67	1.21	3.29	1.20	4.10
1988	1.03	14.68	10.25	59.98	0.21	1.54	1.43	3.33	1.20	2.40
1989	0.76	14.55	11.16	60.59	0.23	1.81	1.42	3.52	2.40	4.90
1990	0.70	14.20	11.60	60.90	0.20	1.10	1.40	2.60	NA	NA
Durum:										
1986	1.01	13.44	9.73	62.51	0.35	0.90	0.99	1.54	1.52	NA
1987	1.08	13.60	9.17	61.95	0.42	4.56	1.31	5.21	1.80	NA
1988	0.92	13.95	8.62	62.67	0.35	2.26	1.09	3.40	1.90	NA
1989	1.24	14.70	8.62	61.52	0.47	2.40	1.35	4.32	1.80	NA
1990	0.80	13.10	9.50	61.90	0.40	1.10	1.40	2.90	NA	NA
White:										
1986	0.86	10.86	9.29	60.06	0.13	1.44	1.28	1.62	1.06	2.19
1987	0.81	10.20	9.69	59.62	0.08	0.99	0.96	2.01	1.70	0.60
1988	0.91	11.33	9.04	60.52	0.18	0.44	1.30	1.94	1.80	NA
1989	0.93	11.64	10.20	59.42	0.31	3.82	1.06	4.45	1.80	NA
1990	0.90	10.50	9.20	59.30	0.10	1.90	1.30	3.10	NA	NA

NA = Not available.
1/ 1990 data is preliminary. 2/ 12-percent moisture. 3/ The sum of the component averages may not equal the total defects average, because some samples did not include results for total defects and/or its component factors.

Appendix table 30--Soviet wheat: Supply and disappearance, 1960/61-1990/91

Year Beginning July 1	Supply						Domestic use				Total disappearance	Ending stocks
	Area harvested	Yield	Production	Beginning stocks	Imports	Total	Feed	Nonfeed	Total	Exports		
	1,000 ha	Mt/ha	1,000 metric tons									
1960/61	60,393	1.06	64,299	2,000	585	66,884	9,685	49,179	58,864	5,020	63,884	3,000
1961/62	63,000	1.06	66,483	3,000	239	69,722	12,996	51,388	64,384	5,338	69,722	0
1962/63	67,411	1.05	70,778	0	242	71,020	8,194	56,082	64,276	5,744	70,020	1,000
1963/64	64,609	0.77	49,688	1,000	9,746	60,434	2,669	51,110	53,779	2,655	56,434	4,000
1964/65	67,887	1.10	74,399	4,000	2,222	80,621	9,198	55,226	64,424	2,197	66,621	14,000
1965/66	70,205	0.85	59,686	14,000	8,549	82,235	20,423	54,181	74,604	2,631	77,235	5,000
1966/67	69,958	1.44	100,499	5,000	3,082	108,581	16,227	55,967	72,194	4,387	76,581	32,000
1967/68	67,026	1.16	77,419	32,000	1,508	110,927	20,314	54,319	74,633	5,294	79,927	31,000
1968/69	67,231	1.39	93,393	31,000	215	124,608	27,098	58,681	85,779	5,829	91,608	33,000
1969/70	66,426	1.20	79,917	33,000	1,147	114,064	33,496	60,127	93,623	6,441	100,064	14,000
1970/71	65,230	1.53	99,734	14,000	484	114,218	38,643	62,372	101,015	7,203	108,218	6,000
1971/72	64,035	1.54	98,760	6,000	3,525	108,285	36,370	57,087	93,457	5,828	99,285	9,000
1972/73	58,492	1.47	85,993	9,000	15,590	110,583	41,344	56,939	98,283	1,300	99,583	11,000
1973/74	63,155	1.74	109,784	11,000	4,508	125,292	30,486	65,806	96,292	5,000	101,292	24,000
1974/75	59,676	1.41	83,913	24,000	2,500	110,413	33,682	59,731	93,413	4,000	97,413	13,000
1975/76	61,985	1.07	66,224	13,000	10,100	89,324	29,929	55,895	85,824	500	86,324	3,000
1976/77	59,467	1.63	96,882	3,000	4,600	104,482	28,237	64,245	92,482	1,000	93,482	11,000
1977/78	62,030	1.49	92,161	11,000	6,649	109,810	42,923	64,887	107,810	1,000	108,810	1,000
1978/79	62,898	1.92	120,820	1,000	5,142	126,962	43,000	63,462	106,462	1,500	107,962	19,000
1979/80	57,682	1.56	90,200	19,000	12,125	121,325	53,000	60,825	113,825	500	114,325	7,000
1980/81	61,475	1.60	98,182	7,000	16,000	121,182	48,000	64,682	112,682	500	113,182	8,000
1981/82	59,232	1.37	81,100	8,000	20,300	109,400	46,800	58,100	104,900	500	105,400	4,000
1982/83	57,278	1.47	84,300	4,000	20,800	109,100	43,000	57,600	100,600	500	101,100	8,000
1983/84	50,800	1.53	77,500	8,000	20,500	106,000	35,000	58,000	93,000	500	93,500	12,500
1984/85	51,061	1.34	68,600	12,500	28,100	109,200	34,700	56,500	91,200	500	91,700	17,500
1985/86	50,265	1.55	78,100	17,500	15,700	111,300	35,600	56,000	91,600	500	92,100	19,200
1986/87	48,728	1.89	92,306	19,200	16,000	127,506	44,806	58,000	102,806	500	103,306	24,200
1987/88	46,684	1.78	83,312	24,200	21,500	129,012	40,500	61,000	101,500	500	102,000	27,012
1988/89	48,058	1.76	84,445	27,012	15,500	126,957	41,445	59,000	100,445	500	100,945	26,012
1989/90	47,676	1.94	92,307	26,012	14,000	132,319	42,307	61,000	103,307	500	103,807	28,512
1990/91 1/	47,500	2.27	108,000	28,512	13,000	149,512	52,000	66,000	118,000	1,000	119,000	30,512

1/ Projections.

Appendix table 31--Chinese wheat: Supply and disappearance, 1960/61-1990/91

Year Beginning July 1	Supply						Domestic use					
	Area harvested	Yield	Production	Beginning stocks	Imports	Total	Feed	Non-feed	Total	Exports	Total disappearance	Ending stocks
	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	27,940	2.45	68,420	25,700	13,000	107,120	1,700	77,720	79,420	0	79,420	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	87,820	35,700	7,400	130,920	2,100	90,120	92,220	0	92,220	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	8,500	129,240	2,400	99,140	101,540	0	101,540	27,700
1987/88	28,808	2.98	85,840	27,700	15,000	128,540	2,500	100,340	102,840	0	102,840	25,700
1988/89	28,793	2.97	85,432	25,700	15,500	126,632	2,600	101,760	104,360	0	104,360	22,272
1989/90	29,841	3.04	90,800	22,272	13,000	126,072	2,600	101,900	104,500	0	104,500	21,572
1990/91 1/	30,300	3.18	96,500	21,572	10,500	128,572	2,700	102,400	105,100	0	105,100	23,472

1/ Projections.

Appendix table 32--European Community wheat: Supply and disappearance, 1960/61-1990/91 1/

Year Beginning August 1	Supply						Domestic use				Total disappearance	Ending stocks
	Area harvested	Yield	Production	Beginning stocks	Imports 2/	Total	Feed	Nonfeed	Total	Exports 2/		
	1,000 ha	Mt/ha	1,000 metric tons									
1960/61	17,857	1.89	33,708	7,720	12,937	54,365	7,900	35,491	43,391	2,612	46,003	8,362
1961/62	16,787	1.91	32,083	8,362	13,390	53,835	7,370	35,257	42,627	3,283	45,910	7,925
1962/63	18,174	2.30	41,867	7,925	8,958	58,750	8,322	35,922	44,244	4,291	48,535	10,215
1963/64	17,039	2.07	35,292	10,215	10,183	55,690	7,675	35,484	43,159	4,396	47,555	8,135
1964/65	17,824	2.27	40,457	8,135	9,316	57,908	8,642	35,199	43,841	6,222	50,063	7,845
1965/66	17,992	2.38	42,852	7,845	10,542	61,239	9,003	35,852	44,855	6,555	51,410	9,829
1966/67	16,921	2.23	37,708	9,829	9,963	57,500	8,667	34,834	43,501	5,589	49,090	8,410
1967/68	16,721	2.64	44,208	8,410	9,393	62,011	9,738	35,938	45,676	7,322	52,998	9,013
1968/69	17,049	2.60	44,389	9,013	12,032	65,434	10,828	35,197	46,025	9,239	55,264	10,170
1969/70	16,542	2.57	42,504	10,170	11,800	64,474	12,655	35,096	47,751	10,426	58,177	6,297
1970/71	16,267	2.54	41,285	6,297	12,657	60,239	13,284	35,004	48,288	5,836	54,124	6,115
1971/72	16,343	2.96	48,329	6,115	11,431	65,875	12,922	35,588	48,510	9,005	57,515	8,360
1972/73	16,028	3.02	48,388	8,360	12,213	68,961	15,169	34,681	49,850	12,087	61,937	7,024
1973/74	15,317	3.11	47,681	7,024	12,404	67,109	11,939	34,331	46,270	11,779	58,049	9,060
1974/75	15,784	3.34	52,733	9,060	10,416	72,209	12,787	35,547	48,334	12,301	60,635	11,574
1975/76	14,504	3.11	45,086	11,574	12,280	68,940	9,556	35,368	44,924	14,514	59,438	9,502
1976/77	15,425	3.02	46,572	9,502	10,174	66,248	9,987	35,601	45,588	10,928	56,516	9,732
1977/78	13,951	3.19	44,493	9,732	13,343	67,568	10,779	36,688	47,467	12,656	60,123	7,445
1978/79	15,063	3.67	55,317	7,445	11,745	74,507	12,056	35,837	47,893	15,348	63,241	11,266
1979/80	14,807	3.59	53,172	11,266	11,979	76,417	12,771	36,093	48,864	17,829	66,693	9,724
1980/81	15,607	3.94	61,541	9,724	11,392	82,657	13,332	36,088	49,420	21,674	71,094	11,563
1981/82	15,651	3.71	58,104	11,563	12,071	81,738	13,993	35,655	49,648	22,333	71,981	9,757
1982/83	16,024	4.04	64,659	9,757	10,142	84,558	15,942	34,291	50,233	21,897	72,130	12,428
1983/84	16,078	3.97	63,789	12,428	10,900	87,117	21,093	34,917	56,010	22,337	78,347	8,770
1984/85	16,205	5.13	83,138	8,770	12,965	104,873	23,179	36,927	60,106	28,389	88,495	16,378
1985/86	15,293	4.68	71,627	16,378	15,331	103,336	23,700	35,553	59,253	27,758	87,011	16,325
1986/87	15,735	4.58	72,035	16,325	13,483	101,843	21,732	34,943	56,675	28,043	84,718	17,125
1987/88	15,892	4.50	71,448	17,125	13,769	102,342	21,963	36,279	58,242	28,365	86,607	15,735
1988/89	15,506	4.82	74,676	15,735	13,631	104,042	22,008	37,402	59,410	32,577	91,987	12,055
1989/90	16,254	4.82	78,306	12,055	12,477	102,838	21,520	36,632	58,152	31,800	89,952	12,886
1990/91 3/	15,748	5.12	80,649	12,886	14,505	108,040	23,515	37,091	60,606	31,765	92,371	15,669

1/ Data include all 12 members of the European Community for all years regardless of membership in a given year.
2/ Includes intra-EC trade. 3/ Projections.

Appendix table 33--Canadian wheat: Supply and disappearance, 1960/61-1990/91

Year Beginning August 1	Supply						Domestic use					
	Area harvested	Yield	Production	Beginning stocks	Imports	Total	Feed	Nonfeed	Total	Exports	Total disappearance	Ending stocks
	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	19,690	13,261	0	32,951	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	0	30,378	1,982	3,257	5,239	17,541	22,780	7,598
1985/86	13,729	1.77	24,252	7,598	0	31,850	2,060	3,538	5,598	17,683	23,281	8,569
1986/87	14,239	2.20	31,378	8,569	0	39,947	2,838	3,596	6,434	20,782	27,216	12,731
1987/88	13,473	1.93	25,950	12,731	0	38,681	4,438	3,424	7,862	23,514	31,376	7,305
1988/89	12,987	1.23	15,995	7,305	0	23,300	2,260	3,588	5,848	12,420	18,268	5,032
1989/90	13,627	1.80	24,578	5,032	0	29,610	2,300	3,443	5,743	17,350	23,093	6,517
1990/91 1/	14,100	2.26	31,800	6,517	0	38,317	2,500	3,400	5,900	17,500	23,400	14,917

1/ Projections.

Appendix table 34--Australian wheat: Supply and disappearance, 1960/61-1990/91

Year Beginning October 1	Supply						Domestic use					
	Area harvested	Yield	Production	Beginning stocks	Imports	Total	Feed	Nonfeed	Total	Exports	Total disappearance	Ending stocks
	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	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	1,646	4,087	7,280	11,367	2,285
1983/84	12,931	1.70	22,016	2,285	0	24,301	1,258	2,183	3,441	13,342	16,783	7,518
1984/85	12,078	1.55	18,666	7,518	0	26,184	1,400	1,521	2,921	14,679	17,600	8,584
1985/86	11,736	1.38	16,167	8,584	0	24,751	1,350	1,510	2,860	16,026	18,886	5,865
1986/87	11,135	1.45	16,119	5,865	0	21,984	1,500	1,073	2,573	15,639	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	1,885	2,835	11,375	14,210	2,600
1989/90	8,936	1.58	14,121	2,600	0	16,721	1,000	2,061	3,061	10,760	13,821	2,900
1990/91 1/	9,850	1.59	15,700	2,900	0	18,600	1,000	2,800	3,800	11,000	14,800	3,800

1/ Projections.

Appendix table 35--Argentine wheat: Supply and disappearance, 1960/61-1990/91

Year Beginning December 1	Supply						Domestic use						Ending stocks
	Area harvested	Yield	Production	Beginning stocks	Imports	Total	Feed	Nonfeed	Total	Exports	Total disappearance		
	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	4,500	4,600	5,900	10,500		131
1990/91 1/	5,900	1.90	11,200	131	0	11,331	100	4,600	4,700	6,200	10,900		431

1/ Projections.

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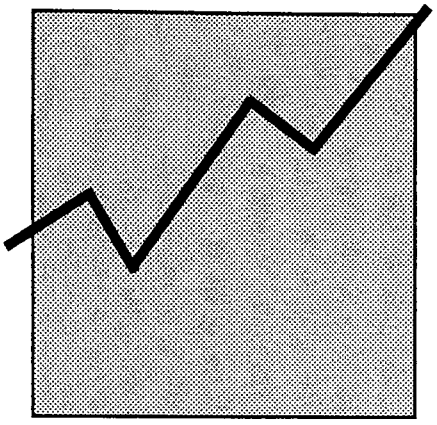
OUTLOOK '91 CHARTS



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