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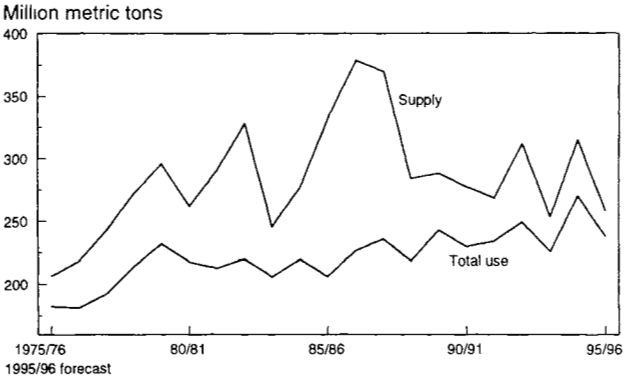
November 1995

Feed

Situation and Outlook Yearbook

U.S. Feed Grain Supplies Tighten

Million metric tons



Feed Situation and Outlook Yearbook. Commercial Agriculture Division, Economic Research Service, U.S. Department of Agriculture, November 1995, FDS-1995.

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Summary

Feed Grain Supply and Use To Fall Sharply in 1995/96

Lower production of all four feed grains, especially corn, is forecast to reduce feed grain supplies 18 percent in 1995/96 to 258 million metric tons. Feed grain production is forecast to be down 75 million tons from the 1994 record because of lower harvested area for each feed grain (corn, sorghum, barley, and oats) and reduced yields for all except barley. While the drop in supplies will be large, the year-to year reduction is smaller than in the drought years of 1983/84 and 1988/89, as well as in 1993/94, when floods slashed corn production.

Feed grain use is forecast to decline 12 percent from the 1994/95 record to 238 million tons. Use in 1995/96 would still be the fourth largest on record, however, due to strong demand from both the domestic and international markets. The strong demand is projected to pull down feed grain ending stocks to the lowest level since 1974/75. (Because of changes in the crop marketing years, however, present stocks data are not directly comparable with years prior to 1975.)

Corn production in 1995 is forecast at 7.37 billion bushels, down 27 percent from the 1994 record. Yields are forecast at 113.7 bushels per acre, well below last year's record 138.6 and about 12 bushels below trend. The lower production will be partially offset by higher beginning stocks, but total 1995/96 corn supplies are forecast 5 percent below last year's use. Thus use will have to decline in 1995/96. Exports are forecast down 6 percent and domestic use down 13 percent. Tight supplies and strong demand will raise corn prices sharply, with season-average farm prices projected at $2.95-$3.35 per bushel in 1995/96, up from $2.26 last season.

Feed and residual use of corn for 1995/96 is expected to be down 17 percent from last year, and the lowest since 1989/90. Food, seed, and industrial (FSI) use of corn is expected to show little or no change from the 1.7 billion bushels used in 1994/95. No growth is expected in use to make ethanol, following rapid growth in recent years.

Supplies of sorghum, barley, and oats will also decline sharply in 1995/96. However, hay production in 1995 is forecast up 5 percent to a record 157 million short tons.

Lower global coarse grain production and continued strong use are projected to reduce world 1995/96 ending stocks to the lowest since 1973/74, with the stocks-to-use ratio plummeting to a record low. Import demand for U.S. corn will remain strong because record foreign use of coarse grains for feeding is forecast to continue, competitors have low exportable supplies of coarse grains, and supplies of feed wheat are limited. China's action in the world grain market will also be a key factor shaping global trade in 1995/96.

Feed Grain Supplies To Fall Sharply

A decline in production of all four feed grains is forecast to reduce 1995/96 feed grains supplies 18 percent to 258 million metric tons. Despite reduced feed grain use, ending stocks are expected to fall to very low levels.

Forecast 26-Percent Drop in Production To Cut Supplies

U.S. feed grain production in 1995 is forecast at 209 million tons, a decline of 75.4 million from the record high of 1994. Corn accounts for most of the decline, but output of the other feed grains will also be down. Lower production reflects both lower acreage and yields. Plantings of all feed grains declined 9 percent, in part because of adverse weather conditions at planting time. Average yields also fell for each feed grain except barley.

Feed grain supplies in 1995/96 are forecast at 258 million tons, 18 percent less than the previous year. Corn is expected to comprise about 88 percent of total feed grain supplies. This is about the same as the previous year, but high compared with the 1980's, when corn's share averaged 82 percent.

While the forecast year-to-year drop in feed grain supplies in 1995/96 is large, at 58 million tons, it would still trail a number of other years. These include the drought years of 1983/84 and 1988/89, when supplies fell 83 million and 85 million tons, respectively. In addition, supplies dropped 60 million tons in 1993/94 after floods and excess moisture slashed the corn crop.

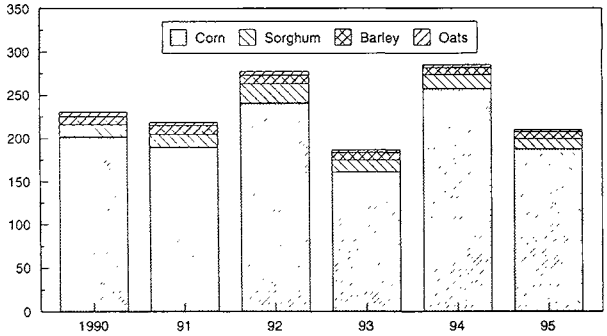
Feed Grain Use To Fall in 1995/96, But Remain Relatively High

Feed grain use is forecast at 238 million tons, down 12 percent from the 1994/95 record. The prospective year-to-year drop would be the second largest ever, exceeded only by 1974/75. This would still leave use as the fourth largest on record, however, with strong demand from both the domestic and international markets.

Figure 1

U.S. Feed Grain Production

Million metric tons



1995 forecast.

Even with the lower forecast use, a large drawdown in stocks is projected in 1995/96. Ending stocks of feed grain are forecast at 20 million tons, the lowest since 1974/75. (Because of changes in the crop marketing years, present stocks data are not directly comparable with years prior to 1975.)

The tight outlook for 1995/96 invites comparisons with 1993/94, when reduced supplies also slashed feed grain use. The key difference is that the domestic and international demand base is larger, which is expected to put more upward pressure on prices. Global demand for U.S. corn is much stronger than in 1993/94, while prospective imports of feed grains and wheat for feeding are expected to be lower than in 1993/94.

Disappearance in 1994/95 Shatters Previous Record

In 1994/95, feed grain disappearance was 270 million tons, reflecting very strong demand and record feed grain output.

Table 1--Feed grain base acres idled under Government programs

Program	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96 1/
			Million acres			
ARP:						
Corn	6.1	4.7	3.1	6.6	0	4.7
Sorghum	1.0	0.8	0.5	0.6	0	0
Barley	0.7	0.7	0.4	0.0	0	0
Oats	0	0	0	0	0	0
Subtotal	7.9	6.2	4.1	7.2	0	4.7
CRP:						
Corn	3.8	3.9	4.1	4.3	4.3	4.3
Sorghum	2.4	2.4	2.4	2.5	2.5	2.5
Barley	2.7	2.8	2.8	2.8	2.8	2.8
Oats	1.3	1.3	1.4	1.4	1.4	1.4
Subtotal	10.2	10.3	10.6	11.0	11.0	11.0
Other 2/:						
Corn	4.6	3.5	2.9	5.0	3.2	2.3
Sorghum	2.3	2.1	1.9	2.1	2.1	1.8
Barley	2.2	2.0	2.4	3.0	3.2	2.4
Oats	0.2	0.7	0.8	1.0	0.7	0.6
Subtotal	9.3	8.3	8.0	11.1	9.1	7.1
Total:						
Corn	14.5	12.1	10.1	15.9	7.5	11.3
Sorghum	5.7	5.3	4.9	5.1	4.5	4.3
Barley	5.6	5.4	5.6	5.8	6.0	5.2
Oats	1.5	2.0	2.1	2.4	2.1	2.0
Total idled	27.3	24.7	22.7	29.2	20.1	22.8

1/ Based on June program sign-up. Final data not yet available; will likely change. 2/ 0/85-92 and idled normal flex acres. Flex Program began in 1991.

Despite the record production, 1994/95 feed grain supplies were not a record because of low carryin stocks.

Domestic use of feed grains in 1994/95 was 5 percent larger than the previous record set in 1992/93. Exports surged to the highest level since 1989/90 and there were strong gains in feed and residual and industrial use. Corn fueled these gains as total use of the other feed grains remained well below previous highs.

Government Outlays on Feed Grains To Decline

Prices for each of the feed grains are expected to rise substantially in 1995/96. The increases will sharply reduce government outlays this year because of lower deficiency payments. Market prices of both corn and sorghum are likely to exceed the target prices of $2.75 and $2.61 per bushel, but there will be some 0/85-92 payments because projected 1995/96 payments announced last winter are guaranteed.

For 1996/97, the Secretary of Agriculture has indicated the intent to have a zero acreage reduction program (ARP) for corn. In the absence of new farm legislation, he does not have the authority to make this decision.

Steep Decline in Corn Production To Reduce Use

The 1995 corn crop is forecast down more than a fourth from the 1994 record. Tight supplies and strong demand are expected to cause stocks to fall to the lowest level since 1975/76. Prices are forecast up sharply.

Lower Acreage and Yields Slice Production

Corn production in 1995 is forecast at 7,373 million bushels, based on conditions on November 1, a decline of 27 percent from the 1994 record. Yields are forecast at 113.7 bushels per acre, 24.9 bushels below 1994 and about 12 bushels below trend. Planted acreage fell to 71.4 million acres, the lowest since 1988. Harvested acres are forecast at 64.8 million, still nearly 2 million acres higher than 1993 when floods and excess moisture not only reduced corn planting, but led to widespread abandonment. These forecasts are still subject to change, and final crop estimates will be released in January.

Very wet weather delayed planting, causing some intended plantings to be switched to other crops and preventing some land from being planted to any crop. Much of the corn crop was planted late, reducing yield potential and making the crop more vulnerable to damage from hot summer weather and early frosts.

The 7.5-percent ARP for this year's crop was announced in the fall of 1994, based on projected supply and use at that time. However, when China banned corn exports, demand for U.S. corn soared. Rising corn prices in the spring—spurred on by the planting problems—increased farmers' incentives to plant corn, and acreage would probably have been considerably higher if drier conditions had prevailed.

Growing conditions during the summer were mixed, leading to shifting expectations about the size of the crop throughout the summer. The wide range in planting times also led to great variability in the stages of the crop, complicating crop assessment. Despite some episodes of severe heat early in the summer, damage was limited, and in many areas, the crop made rapid progress after its late start. But, in August, conditions generally deteriorated due to searing heat and dryness, while reports of grey leaf spot disease and corn borer infestations became common. An early frost that hit the western Corn Belt and central Plains in late September also harmed yield prospects. Ironically, October weather in the Corn Belt was generally favorable, allowing very rapid harvest for the month.

Use To Shrink, But Demand Prospects Strong

Forecast corn demand in 1995/96 remains relatively strong, coming off record use in the 1994/95 crop year. Total use is projected at 8,325 million bushels, down from 9,404 million last year, but still the third highest ever. Smaller supplies will restrict prospective use, with domestic users having to compete with foreign buyers for available supplies.

The impact of higher corn prices on end users will vary, largely reflecting the margins prevailing for different industries. In addition, some buyers may have contracted at lower prices or hedged in the futures market to lock in prices earlier in the year. Demand for corn by most industrial users is traditionally the most price inelastic, and the other components of corn demand—exports, and feed and residual—are typically more price-sensitive.

The tight U.S. supplies and sharply higher prices will cause some reduction in global import demand. But demand will remain strong because of income-driven demand growth in Asia and the lack of alternatives to U.S. corn in world markets. Exports are projected to slip about 125 million bushels from 1994/95. Food, seed, and industrial (FSI) use is expected to show little or no growth, as potential gains are squeezed by the tighter corn situation. As in most years when supplies drop sharply, feed and residual use will account for most of the adjustment.

An examination of adjustments to tight corn supplies and high prices in previous years indicates the pattern has been mixed.

Figure 2

Corn: Season Average Farm Prices

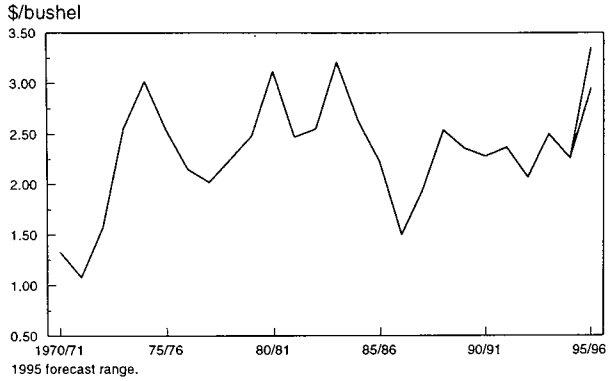
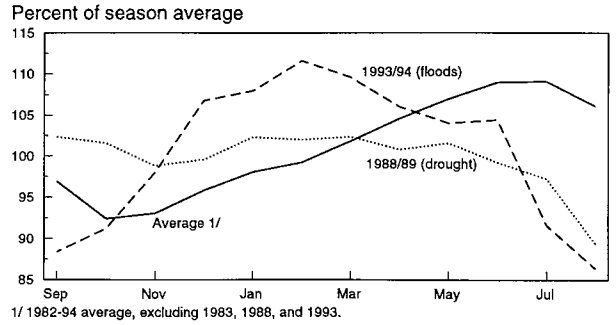


Figure 3

Corn: Seasonal Farm Price Patterns Average and Problem Years



In 1993/94, U.S. exports dropped about 20 percent, but the drop coincided with record competitor shipments. Feed and residual use declined 11 percent that year, or nearly 600 million bushels. In 1988/89, when drought substantially cut the U.S. feed grain crop, exports rose significantly while feed and residual fell 18 percent, or more than 850 million bushels. Similarly, in 1983/84, another drought year, exports went up slightly while feed and residual dropped about 700 million bushels or 15 percent.

Prices To Rise Sharply

Season-average farm prices for corn are projected to be $2.95-$3.35 in 1995/96, up from $2.26 for 1994/95. Strong demand prospects underlie the expectations for high prices. Robust corn demand provided strong support in 1994/95 and prevented prices from declining as much as might have been expected given a record crop. In 1995/96, supplies of the other feed grains will also be tight, putting additional pressure on corn prices.

If the forecast season average price is realized, 1995/96 will rank among the highest price years ever: $3.12 in 1980/81 and $3.21 in 1983/84. A disastrous crop was mainly responsible for driving up prices in 1983. In 1974 and 1980, conditions were more akin to the present, with strong demand and sharp declines from the record crops of the previous years combining to push prices higher.

By late October 1995, many market prices had exceeded the recent highs reached during 1993/94 and were approaching price levels last seen in 1983/84. For example, cash corn prices for Central Illinois points reached over $3.20 per bushel by late in the month and averaged $3.12 for the month. The preliminary farm price for October was $2.95 per bushel, the highest monthly price since $3.12 in August 1984. In 1993/94, the monthly price received by farmers peaked at $2.79.

Price expectations for the 1995 crop began to rise in the spring with the planting problems. During the summer, futures prices for corn fluctuated considerably, largely according to the market's perception of crop prospects. When prices slipped, importers, particularly those in Asia, responded to the price breaks with heavy buying, which tended to push prices back up. Prices for the December contract on the Chicago Board of Trade reached $2.96 a bushel in mid-July, but then retreated into early August. After this, prices began to rebound as concerns about deteriorating production prospects increased. The December contract passed $3.00 by mid-September, and hit new contract highs over $3.30 by late October.

Stocks Projected Below 700 Million Bushels

Ending stocks of corn in 1995/96 are projected at 617 million bushels, less than half of the previous year's level and the lowest since 1974/75. The ratio of stocks to total use is forecast at 7.4 percent, compared to 16.6 in 1994/95. This would be the lowest since the current September-August marketing year was established in 1986, and even lower than the estimated equivalent ratios during the mid-1970's. (Estimated ending stocks for a September-August year are only available since 1975/76.)

Corn Production and Disappearance Set Records in 1994/95

Corn production in 1994 soared to a record 10.1 billion bushels, reflecting large plantings and a near perfect growing season. Average yields reached a record 138.6 bushels per acre, more than 7 bushels higher then the old record set in 1992. Among the 17 largest producing States, nine achieved record yields. The growing season was long, with killing frosts occurring later than normal, contributing to the record yields. Harvested grain weight per ear was the highest on record for the 10 States where objective yield surveys (in-the-field counts and measurements) are taken.

Corn silage production rose 8 percent in 1994 to 87.9 million short tons on the strength of a sharp rise in yield. Reflecting favorable growing conditions, acreage harvested for silage fell 19 percent to the lowest since 1952.

The bumper crop and robust demand resulted in total disappearance of 9.4 billion bushels in 1994/95, 11 percent more than the previous high of 8.47 billion in 1992/93. Compared to the previous year, use was up 23 percent, led by increased corn exports. The year-to-year export gain was the largest ever. Feed and residual use also registered a huge increase, while FSI rose significantly.

Sorghum Output Drops Sharply in 1995

Tight supplies to raise prices and restrict use in 1995/96. Sorghum acreage continues to shrink.

Reduced Acreage and Lower Yields Cut Sorghum Output 29 Percent

Sorghum output in 1995 is forecast at 464 million bushels, down from 655 million the year before and the lowest since 1956. Both acreage and yields declined from 1994. Average yields are forecast at 56.4 bushels per acre, a steep fall from the record 73 bushels per acre reached in 1994. Area harvested for grain is forecast to decline 8 percent to 8.2 million acres. Final crop estimates will be released in January.

Sorghum is more resilient than corn in the face of severe heat and dryness. Because of this, many farmers in the areas affected by flooding in the spring were expected to plant more sorghum rather than risk late corn pollinating during the hottest summer weather. However, a resurvey by USDA in early August indicated plantings in Illinois, Kansas, and Nebraska had actually dropped below the acreage indicated in USDA's June *Acreage* report. Only Missouri and South Dakota were able to match June planting figures, which included plantings made by early June and acres farmers still intended to plant.

Three States—Kansas, Texas, and Nebraska—account for more than three-quarters of U.S. production and developments there explain most of the decline in 1995 crop prospects. Crops in Nebraska and Kansas are expected to register the biggest drops from 1994, down 70 million and 66 million bushels, respectively. Acreage was down sharply in Nebraska, while yields in both States are expected to fall sharply. Both suffered from heavy rainfall in the spring that delayed planting, while summer growing conditions were less favorable than the year before. The lateness of the crops left them more susceptible to damage from early frosts, which occurred in the third week of September, further reducing yield prospects.

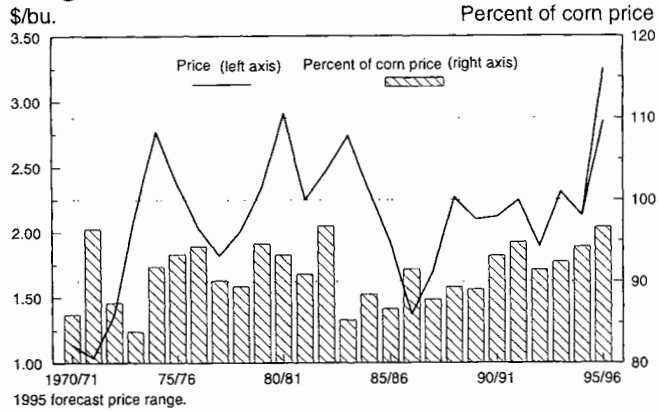
In Texas, production is forecast down 16 million bushels, mainly due to a 6-percent decline in harvested acres. Most of this area probably went into cotton, spurred by a booming market. Weather problems were less of a problem for the sorghum crop in Texas than in Nebraska or Kansas this year, but, in any case, yields in Texas tend to be less variable. This may reflect the larger role of irrigation in Texas. In 1992, 25 percent of Texas sorghum acreage was irrigated, according to the *1992 Census of Agriculture*, the most recent data available. In Kansas, only 10 percent was irrigated and in Nebraska, 7 percent.

Tight Supplies Will Again Limit Use in 1995/96

Sorghum supplies are forecast to decline 24 percent in 1995/96 to 535 million bushels, the lowest in about 40 years. Although carryin stocks are up from the year before, they are still a low

Figure 4

Sorghum: Season Average Farm Price



71 million bushels. Because of the small supplies, sorghum use is projected to fall 22 percent from 1994/95's already low level to 492 million bushels. This would be the lowest use since the late 1950's.

The ratio of ending stocks to use is projected at 8.7 percent, still above the recent low of 7.2 percent in 1993/94. Ending stocks are forecast to drop to 43 million bushels, a record low for the September-August crop year.

Potential sorghum demand is strong for both domestic feeding and exports, given the limited supplies of corn. However, tight supplies will also restrict sorghum use. Feed and residual use is projected at 315 million bushels, down 87 million bushels from the previous year and 138 million below 1993/94, when sorghum filled in some of the gap created by a short corn crop. Exports are also projected to decline 24 percent in 1995/96.

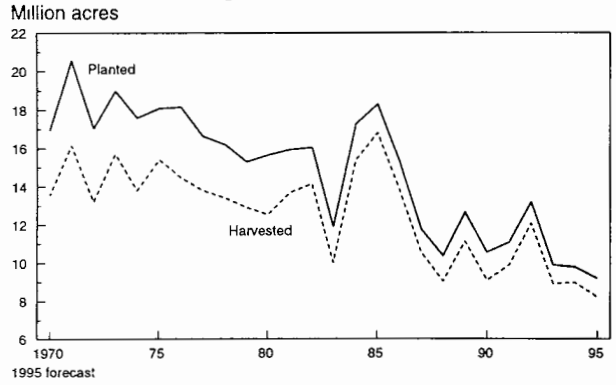
Season average farm prices are projected at $2.85-$3.25 per bushel in 1995/96, up from $2.13 in 1994/95. This would keep the price at a relatively high proportion of the corn price. During the summer months of 1995, sorghum prices often surpassed those of corn. Like corn, cash and farm prices for sorghum are nearing the highest levels since 1983/84.

Sorghum Acreage Continues To Trend Down

Sorghum plantings at 9.2 million acres in 1995 were the lowest since 1929, and expected harvested area for grain would be the lowest since 1953. Sorghum acreage has trended downward since the mid-1980's, when plantings climbed to as high as 18 million acres. The main exception to this trend took place in 1992 when acreage spiked up more than 2 million acres. In that year, a substantial amount of abandoned cotton

Figure 5

Sorghum Acreage Falls Again in 1995



acreage was replanted to sorghum. Even with zero ARP's in 1994 and 1995, sorghum acreage failed to rebound.

Several factors have contributed to this decline. A shift to other crops, particularly corn, has occurred in some areas because of more attractive returns. The largest decline among the States has been in Kansas, where sorghum acreage has dropped more than 1.5 million acres since the mid-1980's, while corn acres rose substantially (see Special Article). On a smaller scale, similar acreage changes occurred in Nebraska and Texas. Part of this switching was facilitated by changes in farm programs that permitted combining the base for corn and sorghum.

Part of the decline can also be attributed to long-term idling under the Conservation Reserve Program (CRP). About 2.5 million acres of sorghum land is in this program, with most enrolled in the late 1980's under 10-year contracts. Reflecting large supplies relative to use, ARP's also reduced acreage through 1993. During 1988-1993, an average of 1 million acres was idled annually by ARP's. Also, producers placed acreage in the 0/85-92 program, averaging 1.9 million acres a year between 1988 and 1994. A significant amount of sorghum land also went into 0/92 in 1995, but final data are not yet available.

Barley Harvest Down 4 Percent in 1995

Production slips to 361 million bushels due to decline in area. Barley use expected to decline, while ending stocks fall again.

Barley Production in 1995 Lowest Since 1988 Drought

Among the feed grains, the barley crop will decline the least in 1995. Production is estimated at 361 million bushels, down 14 million bushels from 1994. Still, the 1995 crop is the lowest since the 1988 drought slashed production to less than 300 million bushels. In contrast to the other grains in 1995, average yields were actually up slightly, rising from 56.2 bushels per acre in 1994 to 57.6 bushels. Acreage planted fell 7 percent to 6.7 million acres, while harvested acres fell 6 percent to 6.3 million.

Some important barley-growing areas escaped the excessive spring rainfall that plagued crops in the Plains and Corn Belt. Planting and growing conditions in Montana, Idaho, and Washington were quite favorable, although some problems developed in Montana in late summer. Yields and production were up in each of these States.

In North Dakota, the largest barley-producing State, a wet spring led to extensive planting delays, and planted acres fell to the lowest since 1982. The harvest there declined 22 percent to 104 million bushels as yields also slipped. Too much moisture had an even greater impact in South Dakota, where planting was severely limited, and the crop was the smallest since 1976. However, South Dakota is a relatively small barley-producing State, accounting for only around 4 percent of the U.S. crop over the previous 5 years.

Barley Disappearance Projected To Decline 6 Percent

Barley supplies are expected to fall 9 percent in 1995/96 to 529 million bushels, the lowest since the mid-1970's. In addition to lower production, carryin stocks of 113 million bushels were the lowest since 1974. Imports are also forecast to decline because of tight supplies in Canada.

Barley imports, virtually all from Canada, are projected at 55 million bushels. In 1994/95, imports were 66 million bushels, of which half were reported by the Bureau of the Census for malting use, compared to 29 percent for malting use in the previous year. The mix of imports in 1995/96 will partly depend on the quality of the crops both in Canada and the United States. Almost three-fourths of the barley imports in the first quarter (June-August) were for malting.

Total barley use is projected at 440 million bushels, down 6 percent from 1994/95. This would be about equal to 1992/93, when a record corn crop and relatively cheap corn depressed barley feed and residual use. This year, it will be limited barley supplies that restrict use, given the tight outlook for corn and the other feed grains.

The season average price for all barley in 1995/96 is projected to rise to $2.60-2.90 per bushel. Rising prices for corn will also boost barley prices. The preliminary farm price of $3.08 in October for malting barley was the highest monthly price since the 1988/89 drought year, while the preliminary feed barley price of $2.64 was the highest since June 1981. In

Figure 6

U.S. Barley Imports and Exports Converge

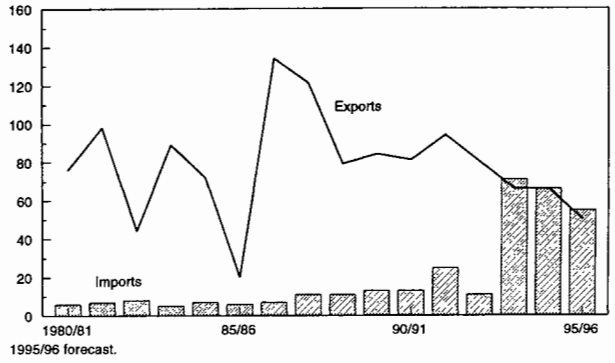
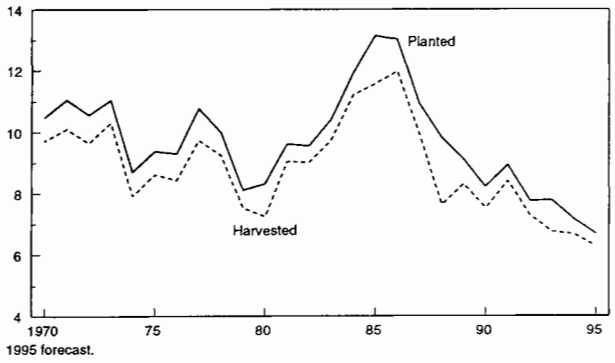


Figure 7

Barley Acreage Continues To Decline



1994/95, the season average price was $2.03 per bushel, with feed barley at $1.83 and malting barley at $2.27.

Barley demand for malting and food use is expected to remain steady, and reductions are expected in feed and residual use and exports. Exports are projected to drop 25 percent from 1994/95 to 50 million bushels. This would be the smallest since 1985/86, the year before the Export Enhancement Program (EEP) started. Barley feed and residual use is expected to slip 5 percent to 215 million bushels.

Harvested Barley Acreage at 90-Year Low

Area planted to barley in 1995 was the lowest since plantings were first estimated in 1926. Area harvested for grain is the lowest since 1903. Like oats and sorghum, barley acres are very low by historical standards, after trending downward during the last decade.

Despite some shifting at the margin to wheat, minor oilseeds and some other crops, no large-scale shifting to other crops accounts for this downtrend. With moisture a limiting factor in most producing areas, there are not that many alternative crops. A considerable amount of barley land has been idled, although the ARP for barley has been set at zero since 1993. However, acres placed in the 0/85-92 program are relatively high, reaching 2.7 million in 1994, after averaging 1.7 million between 1988 and 1993. For 1995, use of this option was also significant, but final data are not yet available. Barley also has a large amount of land idled under the CRP, among the largest share of any commodity. Enrolled acreage in 1995 stood at 2.8 million acres.

Oats Production Set New Low in 1995

Production lowest on record since the first estimates were made in 1866.

Production Declines 29 Percent in 1995

U.S. oats production totaled 163 million bushels in 1995, down 29 percent from 1994. Most of the decline was in acres harvested, which were down 26 percent. Yields were down only 3 percent. Producers planted 5 percent fewer acres of oats in 1995, but only 47 percent of the planted acres were harvested for grain. This compares with 60 percent of the planted acres harvested for grain in 1994, when the acreage reduction program (ARP) for corn was set at zero. Many farmers use oats as a conserving crop on corn ARP acreage and this cannot be harvested for grain. Also, the late plantings may have caused greater abandonment. The March plantings intentions report indicated farmers planned to harvest 54 percent of the planted acres for grain.

Oats is a crop that prefers a cool growing season. For spring oats, farmers sow early in the spring so the crop will mature before the hot summer weather hits and lowers yields. In 1995, much of the traditional oats-growing States had a wet spring that delayed planting, forcing farmers to reduce planting. Specifically, South Dakota, usually the second largest oats-producing State, planted 53 percent fewer acres than the year before and produced 11.5 million bushels, down 63 percent from 1994. North Dakota, the top producer in the last 3 years, harvested 23 million bushels, down 32 percent with acreage down 24 percent.

Oats Use To Decline

With the drop in 1995/96 production, total supply is expected to be 369 million bushels, down 14 percent from 1994/95. Imports in 1995/96 may total 105 million bushels, up 13 percent from last year. Most U.S. oats imports come from Canada, Finland, and Sweden. One of the largest factors in determining U.S. oats imports this year is whether the EU will allow subsidized oats exports from Finland and Sweden.

Total oats use in 1995/96 is expected to be a record low 281 million bushels. The recent low of 294 million bushels was set in 1988/89. Food and seed use of oats is likely to remain near recent levels of 125 million bushels. Exports of 1 million

Figure 8

Oats: Planted and Harvested Acreage

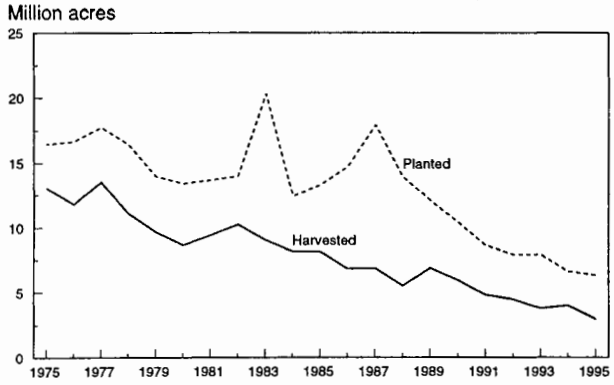
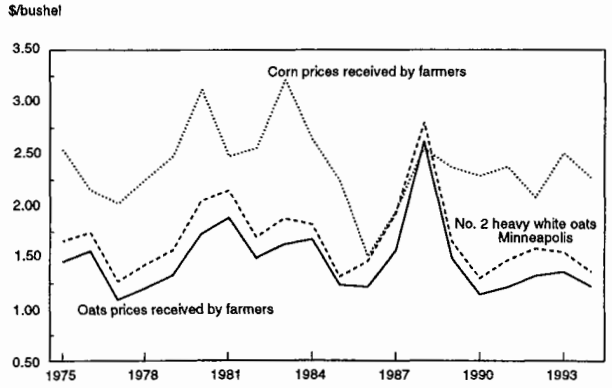


Figure 9

Oats and Corn Prices



bushels are also likely to continue. Thus, most of the adjustment to the sharply lower supplies will come in feed and residual use. However, specialty feed uses for race and pleasure horses are likely to continue at present levels regardless of price.

Oats Prices To Increase

Prices received by farmers for oats in 1995/96 are expected to range between $1.55 and $1.65 per bushel, up from $1.22 in 1994/95. Prices at this level would be about 51 percent of the corn price, slightly below 1994/95 and 1993/94. Oats prices averaged $1.47 per bushel in June-October. If oats prices had reacted in 1995/96 as they did in 1988/89 when they were 104 percent of corn prices, oats prices would have been much stronger since June.

Record Hay Production in 1995/96

Texas and South Dakota are the top hay-producing States in 1995. Supplies per roughage consuming animal unit are about the same as last year.

All hay production in 1995 is forecast at a record 157 million short tons, up from 150 million in 1994. Hay stocks on hand May 1, 1995, totaled 20.8 million tons, down 6 percent from 1994. Hay supplies for 1995/96 are 3 percent above 1994 and even though the index of roughage consuming animal units (RCAU) is up 2 million units, supplies per RCAU are nearly the same as 1994/95's 1.2 tons.

Hay production in 1995 rose 4.6 percent from a year earlier, due to a 2.5-percent increase in acreage and a 2-percent rise in yields. Alfalfa and alfalfa hay mixture production was up 5.5 percent from 1994, as yields rose 3.9 percent and acreage was up 1.7 percent. Other hay production was up 3.4 percent from the 68.5 million tons produced in 1994, with almost all of the increase due to acreage, which was up 3.1 percent.

California remains the leading alfalfa producer as in 1993 and 1994. South Dakota, Iowa, Wisconsin, and Minnesota round out the top five producing States. Only Minnesota, South Dakota, and Wisconsin were in the top five in all 3 years and none of these was ranked in the same order as in 1995. Texas was the leading other hay producer in 1995, followed by Nebraska, Kentucky, Tennessee, and Kansas. The top four were also ranked the same in 1993 and 1994 but Oklahoma beat out Kansas for fifth place in 1994 when Kansas's yields were down.

In some regions of the country hay supplies may be tight. The production data confirm press reports of the effect of the dry weather in late summer along the East Coast and New England. For example, New York State hay production is down 12 percent from last year, and Pennsylvania's hay output is 4 percent below last year.

Average hay prices received by farmers have been below a year earlier, averaging $83.26 per ton for the first 5 months of the May-April hay year, down from $87.00 last year. With plentiful supplies, prices in 1995/96 are expected to average slightly below the $86 per ton for all hay in 1994/95.

Figure 10

Hay Supply and Disappearance per RCAU

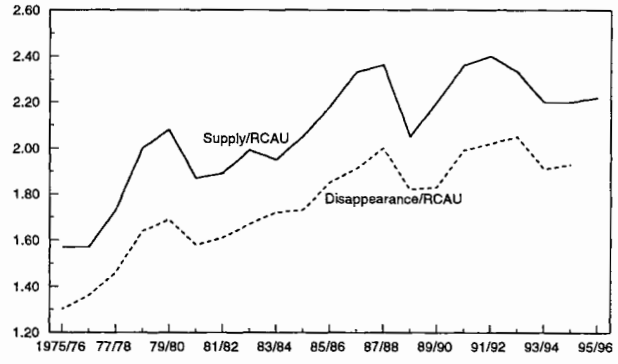
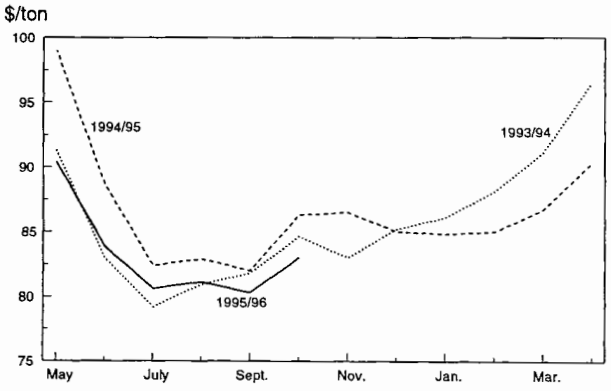


Figure 11

Hay: Prices Received by Farmers



Feed and Residual Use Projected Down 17 Percent In 1995/96

After their experience in 1993/94, feeders are expected to be very creative in formulating rations and will shift to alternative feeds and feedstuffs when performance can be maintained.

Feed and residual use of the four feed grains (corn, sorghum, barley and oats) plus wheat in September-August 1995/96 is expected to total 137.6 million metric tons, down 17 percent from 1994/95. In past years when the corn crop was hurt by floods or drought, the other feed grains helped pick up the slack. However, sorghum, barley and oats feed and residual use is likely to be down from 1994/95. In 1993/94, wheat feeding increased to help offset a small portion of the decline, but in 1995/96, strong prices for wheat are expected to limit wheat feeding.

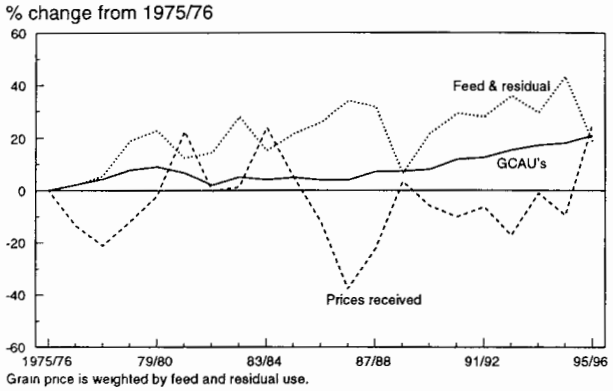
There is no evidence to date that animal numbers have adjusted to the expected declines in feed availability and sharply higher prices. In general feeders are still maintaining profits because of higher meat prices. The index of grain consuming animal units (GCAU's) in 1995/96 is expected to be 2 percent higher than the 84.6 million units in 1994/95. The gain in the index is largely from higher poultry and pig crop numbers.

Broiler meat production in 1996 is expected to increase 7 percent from 1995. The broiler industry has not cut production in response to higher grain prices, mainly because of higher prices and strong returns. Pullet chicks placed in hatchery supply flocks in September were down 1 percent from last year, but this decline follows a 7-percent increase in August. In the spring of 1996, the laying flock will be 1 percent above 1995's high level, and provide the potential for increased production.

Turkey meat production in 1996 is forecast to increase 4 percent from 1995. However, increased costs have caused turkey producers to trim production in prior years and plans could change if fourth-quarter 1995 profits are smaller than expected.

Figure 12

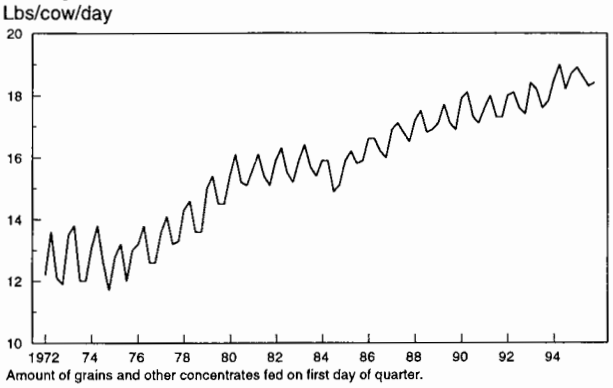
GCAU's, Prices, and Feed & Res. Use of Grains



Grain price is weighted by feed and residual use.

Figure 13

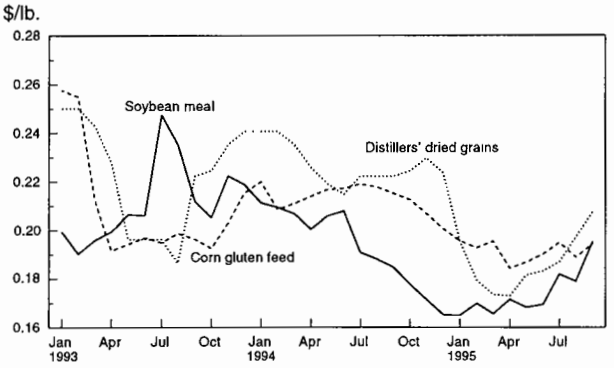
Dairy Cow Feeding Rate



Amount of grains and other concentrates fed on first day of quarter.

Figure 14

Protein Feed Prices



Converted to price per pound of protein.

Egg production in 1996 is expected to increase 2 percent from 1995. The number of layers on September 1 was 2 percent below a year earlier, but the number of egg-type chicks hatched in September was up 4 percent. This was a turnaround from July and August when numbers were down.

Hog producers reported their breeding inventory on September 1 was down 5 percent, but that they intended to have the same number of sows farrow as the year earlier in September-November and in December 1995-February 1996. The September 1 inventory of market hogs was down 2 percent in the lighter weight categories from a year earlier and down 1 percent in the heavier weight categories. Based on reported

intentions, feed demand by the hog sector would remain strong in 1995/96.

Cattle on feed in 1995/96 will likely be nearly the same as in 1994/95. However, cattle feeders discovered in 1993 that they can be very creative in formulating rations and may shift to alternative feeds and feedstuffs if grains become too expensive. In addition, calves can be kept on grass until heavier weights are reached prior to placement in feedlots. The number of cattle on feed on October 1 was up 2 percent from a year earlier and placements are rising seasonally.

The numbers of dairy cows may decline. Availability of high quality alfalfa hay will be tighter this winter and rations may be supplemented with additional protein.

Food, Seed, and Industrial Use Is Expected To Show Little or No Growth in 1995/96

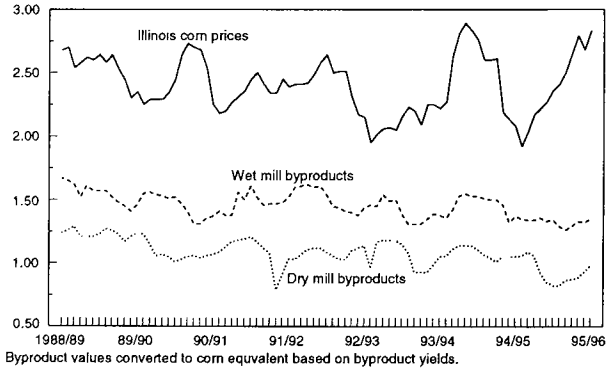
Food, seed, and industrial use is likely to take 19 percent of the 1995/96 corn supply.

Food, seed, and industrial (FSI) use of corn in 1995/96 is expected to show little or no change from the 1.7 billion bushels used in 1994/95. FSI use would represent 19 percent of the total 1995/96 supply, up sharply from 15 percent a year earlier. Although most FSI uses are not as price-sensitive as feeding or exports, some uses may decline with a short crop. Corn sweeteners and seed use are expected to increase in 1995/96.

In 1995/96, corn used to make starch is expected to shrink 2 million bushels from the 247 million bushels used in 1994/95. Preliminary first-quarter industry indications are that starch shipments were lagging a year ago. However, starch use is associated with paper, boxes, building materials, and other items that increase use as the economy expands. Therefore, this would tend to support starch use, especially because more starch is needed to make recycled paper products. Starch prices have increased about $2 per hundredweight from a year earlier for August and September, after being up about 40 cents in June and 60 cents in July. The rise in corn prices is being passed along and the higher prices for starch may cause shifts to more pulp wood used in paper or other substitutions to keep the end product competitively priced.

Corn used to make corn sweeteners in 1995/96 may increase 2 percent from 1994/95's 462 million bushels. Early indications are that corn use is above a year ago but most of the corn sweetener sales for 1995 are under an annual contract and priced under the large crop of last year. Thus, current corn prices may not have been reflected in the sweetener prices to users. Users may not have ready substitutes that can impart the same properties to the finished product or taste the same as corn sweeteners. Where users are "locked in" to corn sweeteners, they will likely find the producers asking higher prices to offset the increase in corn costs.

Figure 15
Corn and Milling Byproducts Values
$/bushel



Byproduct values converted to corn equvalent based on byproduct yields.

Figure 16
Wet Mill Product Prices
Cents per pound

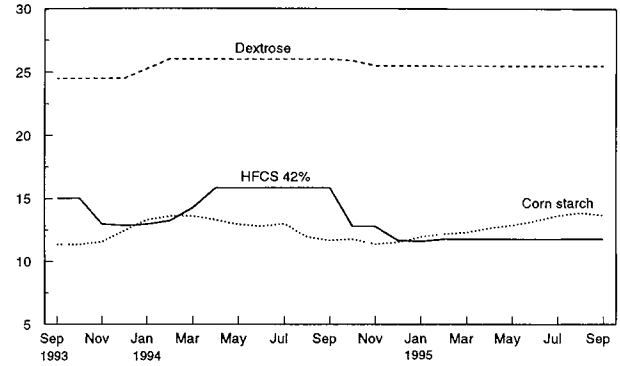
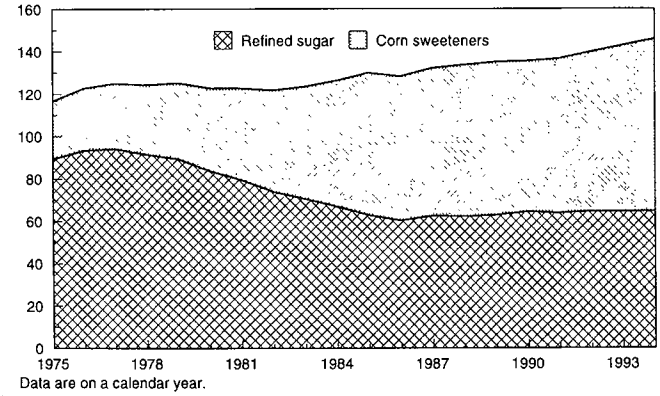


Figure 17
Per Capita Consumption of Sweeteners
Pounds



Data are on a calendar year.

In 1995/96, corn used to make ethanol is expected to decline slightly from the 533 million bushels used in 1994/95. Increased grain prices have caused four dry mill ethanol plants to close since May 1995, and some may not reopen. Not all of these plants were using corn as their raw ingredient, and all of them were outside the main corn-producing areas. One of the plants closing was in North Dakota where the State legislature has limited funding for ethanol subsidies. Minnesota and Nebraska have incentives to encourage production of alcohol and new plants have opened in these States. In an effort to encourage ethanol use, EPA announced a proposed rule change permitting 10-percent ethanol blends in reformulated gasoline year-round.

The effects of higher corn prices are amplified by seasonal effects as stocks of ethanol became large over the summer and ethanol prices declined. The oxygenate market has seen lower prices this year due to increases in methanol production that have brought prices down from historic highs and con-

sequently pushed price of the methanol-ether MTBE (a competing oxygenate made from petroleum derivates and methanol) down as well. Ethanol prices have strengthened as the winter oxygenate season has started.

Using Central Illinois elevator corn prices to farmers and wholesale Midwest prices for corn gluten feed and meal, corn oil and distillers dry grains for September and production-cost estimates from *Oxy-Fuel News*[1] yield an estimated wet-mill cost of ethanol of $1.28 per gallon and a dry-mill cost of $1.44. Reported prices for the end of October in *Oxy-Fuel News* for Chicago were $1.13-$1.22, or well below the estimated cost of production, but some plants may have contracted for their corn when prices were lower.

Corn used in cereal and other products in 1995/96 is likely to remain about the same as last year with some shifting among products. Cereal sales have reportedly not been as strong as in years past, but sales of corn-based snack foods have been growing. The use of corn in beverage and manufacturing alcohol may decline slightly. Tight supplies of corn could shift neutral spirit production to other sources of inputs, either other grain or grain products or non-grain inputs. Alcohol used in manufacturing could become more dependent upon non-grain sources.

[1] Hart's *Oxy-Fuel News*, Hart Publications, Inc., Potomac, MD.

Table 2--Corn: Food, seed, and industrial use, 1980/81-1995/96 1/

Year	HFCS	Glucose and dextrose	Starch	Alcohol--- Fuel	Alcohol--- Beverage	Cereals & other products	Seed	Total
				Million bushels				
1980/81	165	156	151	35	78	54	20	659
1981/82	183	160	146	86	86	53	19	733
1982/83	214	165	150	140	110	60	15	854
1983/84	265	167	161	160	88	70	19	930
1984/85	310	167	172	232	84	81	21	1,067
1985/86	327	169	190	271	83	93	19	1,152
1986/87	338	171	214	290	85	109	16	1,223
1987/88	358	173	226	279	77	113	17	1,243
1988/89	361	182	223	287	107	114	19	1,293
1989/90	368	193	230	321	109	115	19	1,355
1990/91	379	200	232	349	80	114	19	1,373
1991/92	392	210	237	398	81	116	20	1,454
1992/93	414	214	238	426	83	117	19	1,511
1993/94	442	223	244	458	83	118	20	1,588
1994/95	462	231	247	533	84	118	18	1,693
1995/96	470	235	245	530	82	118	20	1,700

1/ Marketing year beginning September 1.

Smaller Grain Use To Lower Rail and Barge Shipments

Rail and barge shipments rose in 1994/95. Barge rates at record high.

Demand for Transportation Services Projected Down

Exports and domestic consumption of total grains and soybeans during 1995/96 are projected at 372.5 million metric tons, 37.2 million below 1994/95. Most of the decrease stems from a projected drop in corn disappearance of 27 million metric tons. Corn exports are projected to fall 3.2 million metric tons from 1994/95 and domestic consumption is projected down 24.2 million metric tons. As a result, demand for grain and barge service is expected to fall during 1995/96. Projected declines in wheat and soybeans disappearance, totaling 4.6 million metric tons, will further depress demand for transportation service.

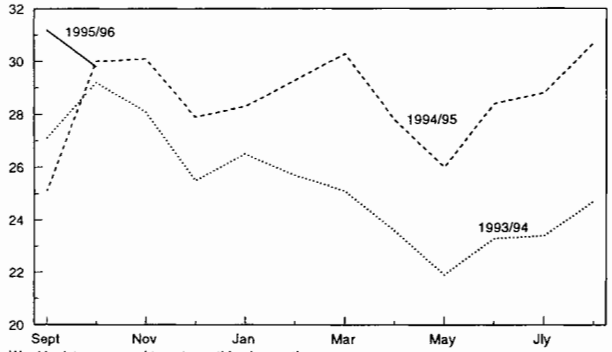
Rail Grain Shipments Up Markedly, but Expected To Slip

During September 1994 through August 1995, rail shipments of grain and oilseeds averaged 28,561 cars per week, 13 percent above a year earlier. Rail loadings of grain are expected to average somewhat below a year earlier during 1995/96 as total disappearance declines.

Grain shipments by rail rose slightly in September 1995 to 31,171 cars per week, up 1 percent from August and 19 percent above the 10-year average for the month. In October, grain loadings declined to 29,757 cars per week, near the 10-year average. Preliminary data for November suggest a further decline to 29,500 cars per week.

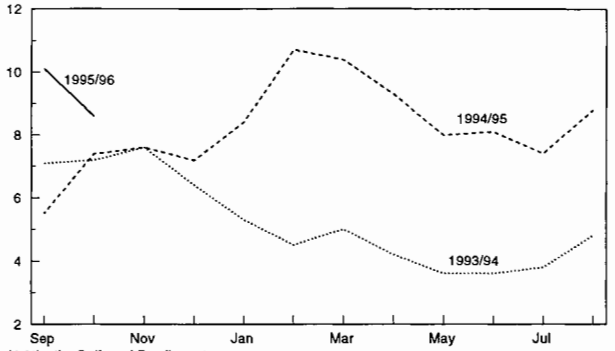
Exporters of corn and wheat are heavy users of rail service. Combined exports of the two grains are now projected down 3.6 million metric tons from 1994/95. As a result, rail car loadings of grain and oilseeds are expected to average 27,000 to 29,000 cars per week during 1995/96.

Figure 18
Railcar Loadings of Grain and Soybeans
1,000 cars/week



Weekly data averaged to get monthly observation.

Figure 19
Railcar Unloadings of Grain at Ports
1,000 cars/week



At Atlantic, Gulf, and Pacific ports.

Rail deliveries to ports in September averaged 10,069 cars per week, 14 percent above August, and 85 percent above September 1994. Increases from 1994/95 were shown for all ports, led by a gain of 3,400 cars per week at Pacific Coast ports. In October, rail deliveries to ports declined 15 percent to 8,566 cars per week, still 15 percent above October 1994.

Railcar Supply Up

On October 17, 1995, the number of jumbo covered hopper cars (4,000 cubic feet capacity or more) in active service increased to 269,185, 5 percent above a year earlier. Privately owned rail cars accounted for the largest share of the growth, 6,433 cars. Railroad-owned cars increased 6,139 cars in the period.

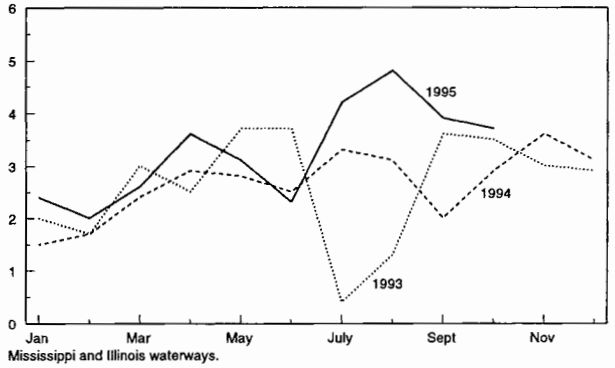
Jumbo covered hopper cars are used for a variety of dry bulk commodities in addition to grain. The growth in available cars, however, suggests that grain shippers will have an adequate supply of railcars in the coming months. However, local problems can be expected during the harvest period.

Barge Shipments Up in 1994/95, but Falling In 1995/96

Shipments of grain by barge on the Illinois and Mississippi Rivers during 1994/95 averaged 3.1 million short tons per month, 11 percent above 1993/94. August shipments were 4.8 million short tons, 55 percent above 1994, and 37 percent above the 10-year average for the month. In September 1995, grain shipments on the Mississippi and Illinois Rivers fell 19 percent from August to 3.9 million short tons. Barge shipments slipped again in October to 3.7 million short tons. Still, this is 16 percent above the 10-year average for the month and 28 percent above October 1994.

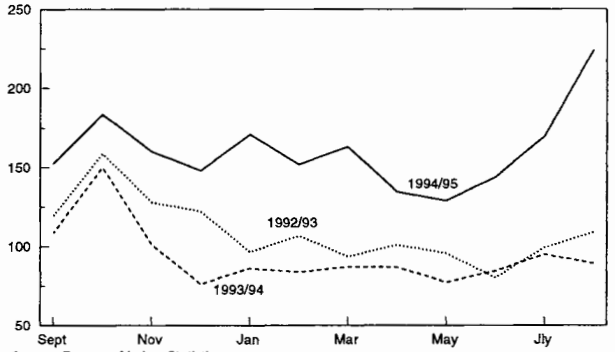
Preliminary data for November suggest that Mississippi River traffic is up about 25 percent from October, and 26 percent

Figure 20
Monthly Grain and Soybean Shipments
Million tons



Mississippi and Illinois waterways.

Figure 21
Barge Rate Index for Grain
% of December 1990



Source: Bureau of Labor Statistics.

above November 1994. Increased corn shipments, up 35 percent, are the chief reason for the increase from October.

Ohio River grain traffic in October rose 34 percent from September to 178,000 short tons per week. Preliminary data for November show volume down 25 percent to 134,000 short tons per week. Grain shipments on the Ohio averaged 208,000 short tons per week in October 1994.

Barge Rates Up Dramatically

The Bureau of Labor Statistics' index of barge rates for grain on the Mississippi River rose to 223.8 (December 1990=100) in August 1995, up 32 percent from the prior month and a record high for the 1990's.

Barge rates were high through 1994/95, averaging 160.7, or 72 percent above the prior year and 48 percent above 1992/93, the previous high in the 1990's. Preliminary indications are that barge rates remained nearly level in October. In the last week of September, barge lines were offering spot service for 235 to 255 percent of tariff. At the end of October, the same service was offered at 230 to 255 percent of tariff. Offers of service to be supplied in December-January were as low as 200 percent of tariff. At this time, it appears that reduced exports will cause barge rates to slip from the record highs of 1994/95.

Barge Fleet Maintaining Its Size

The inland barge industry appears to be replacing its jumbo covered barges. These are best suited to haul grain and other materials needing protection from the weather. Prior to 1993, the barge fleet was believed to be declining in number as worn out and damaged barges were not replaced. In 1993, 10,694 jumbo covered barges were reported in service. By 1994, the inventory rose to 10,950. Since 1992, about 250-280 jumbo covered barges have been constructed each year. In contrast, during the 1980's, 2,000-3,000 units were constructed each year.

Rail Rates Up in August, but Expected To Rise Further

Although rail shipments of grain during 1994/95 averaged 12 percent above the prior year, rail rates for grain increased about 1 percent. The Bureau of Labor Statistics' Freight Rate Index for Grain averaged 116.9 (December 1984=100) during 1994/95. Preliminary data show the index at 114.9 for August and 115.6 for September 1995.

Contract rates cover much of the grain moved by rail. These contracts restrain rate increases during the life of the contract and often offer discounts in return for increased volume. High use of rail in 1994/95, 28,561 cars per week, may encourage railroads to negotiate higher rates for long term shipping contracts that will apply during 1995/96.

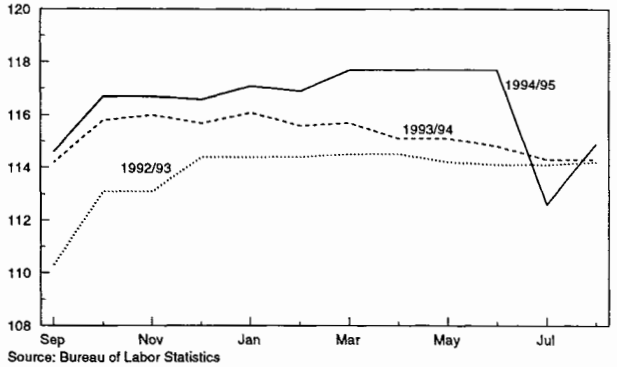
Diesel Fuel Prices Remain Stable

Diesel fuel prices averaged $1.11 per gallon in 1994/95, down 3 percent from the prior year. In September 1995, diesel prices averaged $1.12 per gallon, essentially the same as in 1994. The seasonal upturn usually found in October did not take place. October's diesel fuel price continued to average $1.12 per gallon.

Truck Costs Up Slightly

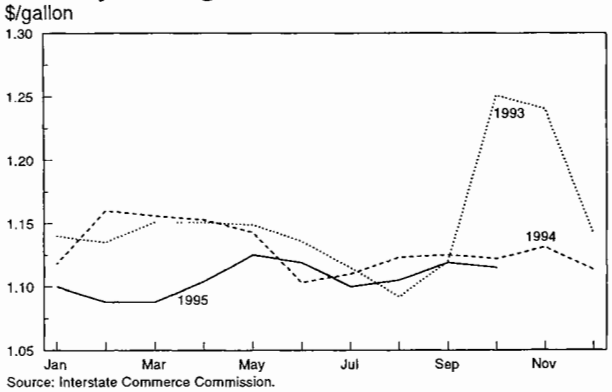
Truck operating costs averaged $1.30 per mile in January-September 1995, up 1 percent from 1994. For September, operating costs were $1.31 per mile, up nearly 3 cents from September 1994. This suggests that costs of moving grain to points of first sale will be up very slightly from the prior year.

Figure 22
Rail Rate Index for Grain
% of December 1984



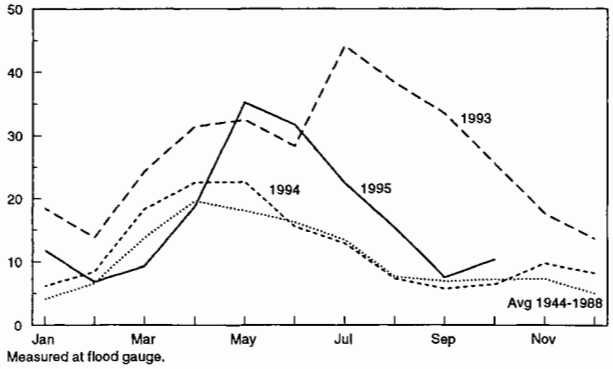
Source: Bureau of Labor Statistics

Figure 23
Monthly Average Diesel Fuel Price



Source: Interstate Commerce Commission.

Figure 24
River Stages at St. Louis



Measured at flood gauge.

Normal Navigation Conditions Expected on the Mississippi and Missouri Rivers

The flood gauge at St. Louis, MO, showed water levels averaging 10.8 feet at mid-October, 50 percent above the 1944-88 average. River levels are expected to decline seasonally through February with no navigation barriers related to water levels in sight.

Ice usually closes the upper Mississippi River in late November or early December. Traffic slackens, but does not cease on the lower Mississippi during December-March. Over the past 10 years, these 4 months have accounted for 13 percent of the Mississippi's grain traffic on the stretch above Lock 22. November is usually the busiest month, averaging 13 percent of total grain traffic during the past decade.

Extended Shipping Season in Prospect for Missouri River

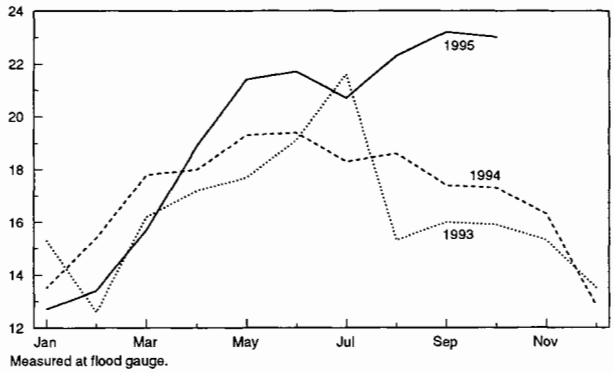
At mid-November, the flood gauge at Sioux City, IA, averaged 22.7 feet, 39 percent above November 1994. Water levels were also up at Kansas City, MO, averaging 17.1 feet, 46 percent above November 1994. Availability of water has allowed the U.S. Army Corps of Engineers to offer an extended navigation season on the Missouri River. The Missouri is expected to close on December 2 at Sioux City and December 11 at St. Louis, 10 days beyond the normal closing dates. The Corps has announced that a normal navigation season is expected for 1996. In a normal year, the Missouri opens in late March and closes in late November.

Aggregate Storage Will Remain Adequate

More than adequate storage space is expected to be available for the 1995/96 grain crops. The much smaller 1995 grain harvest is expected to leave at least 4.8 billion bushels of storage space unused.

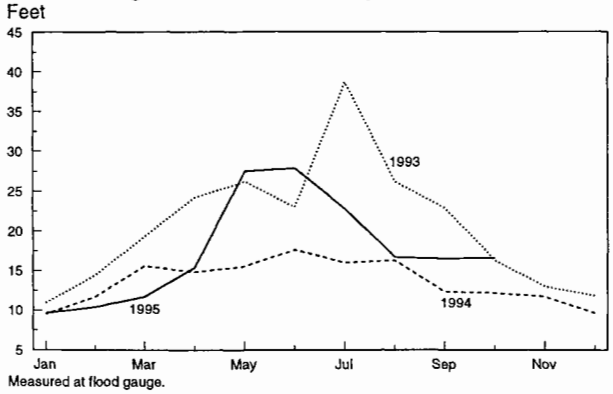
Both on-farm and off-farm grain storage capacity declined 1 percent from 1993 to 1994, totaling 19.9 billion bushels on December 1, 1994. On-farm stocks of grain and soybeans on September 1, 1995, totaled 1.9 billion bushels, up 13 percent from the prior year. Off-farm stocks were up 18 percent from 1994, totaling 2.4 billion bushels. On-farm stocks of corn, sorghum, oats, and barley on September 1, 1995, totaled 1.1 billion bushels, up 37 percent. Off-farm feed grain stocks rose 52 percent to 1.0 billion bushels.

Figure 25
River Stages at Sioux City



Measured at flood gauge.

Figure 26
River Stages at Kansas City



Measured at flood gauge.

Total grain storage capacity continued to decline during 1994. On December 1, 1994, total storage capacity was 19,881 million bushels, 1 percent below the prior year, and 15 percent below 1987. On-farm storage facilities at 11,500 million bushels, continued to account for the majority of storage space, 58 percent.

The number of off-farm facilities dropped by 276 to 11,595. Total off-farm capacity also fell slightly, 1 percent, to 8,381 million bushels. Average facility size rose, averaging 722,818 bushels per facility, up 1 percent from 1993 and 46 percent from 1982. This long term trend of relatively small facilities closing with larger, more efficient facilities remaining in operation is expected to continue. Since 1982, the number of off-farm grain storage facilities has dropped by 3,126 and, off-farm capacity has risen 15 percent to 8,381 million bushels.

Global Coarse Grain Production To Retreat from 1994/95

Reduced global coarse grain production and continued strong consumption are projected to drop 1995/96 ending stocks to the lowest since 1973/74, with the stocks-to-use ratio plummeting to a record low.

Beset by adverse weather conditions, the U.S. corn crop is down sharply, dropping forecast 1995/96 world coarse grain production to 786 million tons, 9 percent below 1994/95. Foreign production, however, is forecast down slightly with higher production in China, South Africa, Europe, and Australia offset by sharply lower production in Russia, Kazakhstan, and several other countries.

Lower use in the United States and the former Soviet Union (FSU) is projected to lead to a 2-percent drop in global coarse grain consumption, presently forecast at 831 million tons. Foreign consumption in 1995/96, however, is projected to rise to a record, led by gains in China.

Low competitor coarse grain supplies in 1994/95 led to strong demand for U.S. corn, helping to fuel a 25-percent rise in U.S. fob Gulf export prices from October 1994. Fob gulf export prices in October, at $141 per ton, were the highest for that month since 1983. Strong coarse grain prices are expected to continue in 1995/96 because of sharply lower U.S. corn production and rising foreign consumption.

Foreign Production Expected Down Slightly In 1995/96

Drought-reduced coarse grain output in Russia and several other countries has contributed to the slight drop in foreign coarse grain production from 1994/95. A sharp increase in China's production, rebounding Australian production, and higher output in Europe have not been enough to compensate for the precipitous decline in the FSU.

China's corn production is forecast to rise 9 percent to a record 108 million tons, surpassing the previous record of 102.7 million. Reported acreage rose 7 percent to a record 22.7 million acres, spurred by high corn prices, while yields also rose.

FSU coarse grain production is presently forecast at 65 million tons, down more than 17 million from 1994/95. Barley production is the most adversely affected, accounting for most of the drop in area and production. Yields are also down substantially from previous years, reflecting mostly the lack of rainfall. However, several years of reduced fertilizer use are also beginning to have an impact.

Higher production is expected in Australia and Europe as a return to more normal weather conditions boosted yield prospects. Even with severe drought in Spain, coarse grain output in the European Union (EU) is forecast up 3 percent to 89 million tons. With the implementation of a lower set-aside by the European Commission for the 1995/96 crop, expectations were originally higher for coarse grain output. However, the overall production outlook deteriorated as crops in Spain were devastated by a drought.

Global production of all coarse grains, except rye, is slated to fall. The largest decline will be in corn, forecast at 501 million tons, down 54 million tons from 1994/95. World barley production is projected to drop to 148 million tons, down 13 million from last year. Barley production in both Australia and Canada is projected up from 1994/95.

Global sorghum output is forecast at 51 million tons, down more than 3 million tons from 1994/95, with the United States accounting for most of the decline. Foreign production is projected up 4 percent as gains in Australia, Mexico, and India

Figure 27
Foreign Coarse Grains Production-Consumption Gap Widens

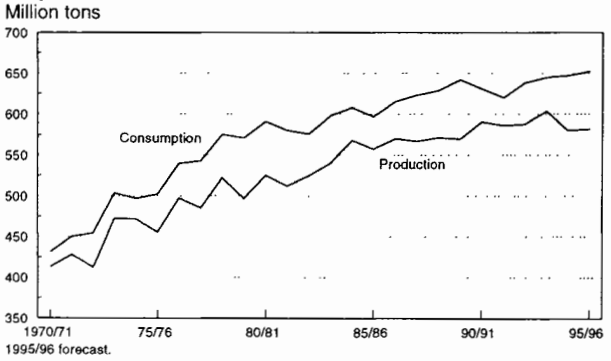
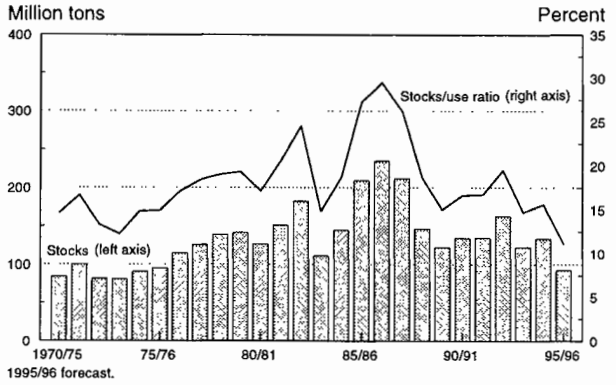


Figure 28
Global Coarse Grains Stocks Fall



more than offset expected lower production in China and the Sudan.

Reduced Coarse Grain Production Leads to Lowest Ending Stocks Since 1973/74

The sharp drop in U.S. corn production and projections for continued large global coarse grain consumption are expected to sharply reduce U.S. and global ending stocks for 1995/96. World coarse grain ending stocks are projected at 88.9 million tons, the lowest since 1973/74. While the forecast drop in U.S. corn ending stocks accounts for much of the decline, ending stocks in Canada are projected to be the lowest since 1961/62 and ending stocks in the EU are the lowest since 1983/84.

Given the expected sharp drawdown in U.S. stocks, there is only a limited margin to reduce inventories much further. This, combined with the limited availability of foreign coarse grain supplies, will keep prices strong in 1995/96.

Tight Supplies To Constrain World Coarse Grain Trade in 1995/96

Limited competitor supplies underpin U.S. corn export prospects despite lower crop outlook.

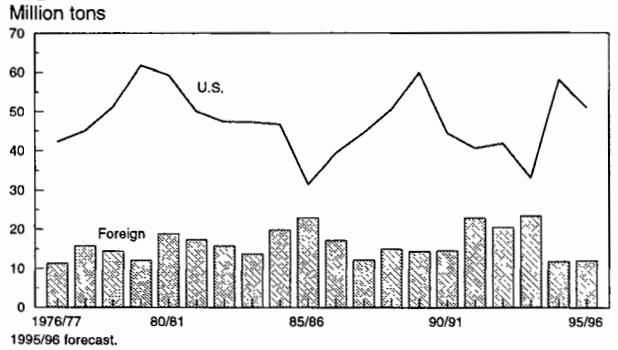
Changing trade patterns highlighted the coarse grain market in 1994/95, allowing the United States, with a bumper corn crop, to expand coarse grain exports to the highest since 1989/90 and capture 68 percent of world trade. Despite lower U.S. corn output in 1995, U.S. corn exports are projected at a relatively robust 51 million tons as the underlying fundamentals that supported strong U.S. exports in 1994/95 remain in place.

Low exports by China and adverse weather in other exporting countries are projected to limit competitor coarse grain exports again in 1995/96. These developments, along with strong income growth in Asia and limited supplies of competing feed wheat, are underpinning demand for U.S. corn exports.

Limited availabilities and strong prices, however, are projected to reduce global coarse grain trade in 1995/96 to 87.1 million tons, down 8 percent from last year. Foreign exports are projected at 30.9 million tons, only slightly above last year's low level. Foreign coarse grain exports in 1994/95 were the lowest since 1979/80, the year that the United States exported a record volume of coarse grain.

Figure 29

Low Competitor Corn Exports Keep U.S. Exports High



Corn Trade Outlook Constrained, Yet U.S. Export Prospects Favorable

The weaker production outlook for the U.S. corn crop and only slightly higher competitor export availabilities are supporting strong 1995/96 corn prices. Despite strong income growth in many countries and an expected limited supply of feed wheat, reduced U.S. supplies and higher prices are likely to constrain global corn trade to 63.5 million tons, 10 percent below 1994/95.

Although global corn trade in 1995/96 will hinge on a number of importers' responses to high prices, China's action in the world market will be a key factor. The sudden reversal in China's status from a major net corn exporter to a net importer in 1994/95 changed the dynamics of the world corn market and helped lead to a 25-million-ton rise in U.S. corn exports to 58 million tons.

Despite a projected record corn crop in China, rising internal demand in 1995/96 is projected to maintain China in its role as a net corn importer. With limited exports projected from Thailand, previously a major exporter, and exports from South Africa highly dependent on variable weather patterns, the United States and Argentina appear to be the only remaining major corn suppliers. Currently, with Argentina virtually sold out of corn, the United States is the only supplier until early 1996 when the Southern Hemisphere countries begin to harvest the corn crops now being planted.

World Trade in Other Coarse Grains To Drop

World barley trade, forecast at 14.1 million tons, is down 3 percent from last year and 26 percent lower than the record 19 million tons traded in 1991/92. While the EU will remain the world's largest barley exporter, strong domestic demand is expected to reduce 1995/96 exports to around 5.5 million tons. This is down 5 percent from 1994/95 and below the nearly 9.5 million tons the EU exported in 1991/92. World

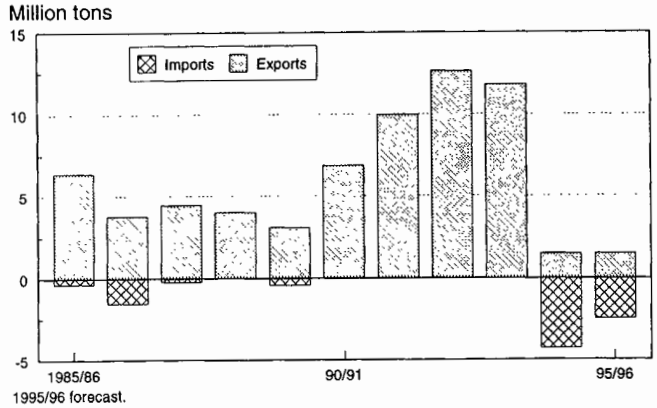
Table 3--World coarse grain trade: Major exporters and importers, by commodity, 1993/94-1995/96 1/

Item	1993/94	1994/95	1995/96 2/
	Mil. metric tons		
CORN			
Exporters:			
U.S.	33.1	58.0	51.0
Argentina	4.2	6.0	6.5
China	11.8	1.5	1.0
Thailand	0.1	0.1	0.1
South Africa	3.2	2.5	1.0
EU	1.8	0.3	0.2
EE	0.2	0.7	1.7
Other	2.4	1.9	3.7
Total	56.5	70.2	63.5
Importers:			
Japan	16.2	16.8	16.0
Former FSU	3.7	0.6	0.9
EU	2.6	3.4	2.6
Korea, Rep.	5.7	9.1	9.0
Taiwan	5.3	6.1	6.0
Mexico	1.7	3.0	3.0
Eastern Europe	0.4	0.4	0.3
Brazil	1.1	1.5	1.5
Egypt	2.1	2.8	2.5
Other	17.7	26.6	21.8
Total	56.5	70.2	63.5
BARLEY			
Exporters:			
EU	6.7	5.8	5.5
Canada	3.8	2.7	3.0
Australia	4.3	1.2	2.6
U.S.	1.6	1.4	1.0
Other	2.3	3.5	2.0
Total	18.6	14.6	14.1
Importers:			
Saudi Arabia	4.6	3.5	3.3
China	1.2	1.5	1.8
Former FSU	1.5	1.1	0.7
Eastern Europe	2.0	0.7	0.1
Japan	1.7	1.6	1.7
Others	7.6	6.3	6.6
Total	18.6	14.6	14.1
SORGHUM			
Exporters:			
U.S.	5.3	5.5	4.2
Argentina	0.4	0.3	0.3
Australia	0.5	0.1	0.3
Others	0.6	0.6	0.2
Total	6.9	6.1	5.0
Importers:			
Japan	2.9	2.3	2.1
Mexico	3.1	2.6	2.4
Taiwan	0.0	0.1	0.0
Israel	0.1	0.2	0.1
Others	0.9	1.0	0.4
Total	6.9	6.1	5.0
COARSE GRAINS			
TOTAL TRADE	85.6	95.0	87.1
FOREIGN	45.6	30.1	30.9
U.S.	40.0	64.9	56.2

1/ October-September year, excludes intra-EU trade. Total might not add because of rounding. 2/ Forecast.

Figure 30

China Becomes a Net Corn Importer



trade has declined significantly from the early 1990's when Saudi Arabia and FSU imported much more barley than they do now.

Policy changes implemented under CAP Reform in the EU-15 have resulted in reduced area planted to barley. Significantly lower stocks and strong domestic demand, due partially to the drought in Spain, have strengthened EU market prices for barley.

Australia is projected to increase barley exports as production rebounds from last year's drought-reduced level. Canada's barley exports are also forecast up in 1995/96, but the increase will be limited by tight supplies following stock drawdowns last year.

Strong demand, mainly for malting barley, will continue to originate from China as growing incomes strengthen demand for beer. China's barley imports for 1995/96 are projected to rise 17 percent to 1.75 million tons. China is one of the largest markets for barley in the world, forecast to surpass Japan and second only to Saudi Arabia.

Global trade prospects for sorghum continue to erode as supply availabilities in the United States, the largest exporter, continue to contract. Projected at 5 million tons, global sorghum trade would be the lowest since 1968/69.

Considerable uncertainty clouds the outlook for oats trade, with trade currently forecast at 2.1 million tons, down slightly from last year. Imports by the United States, accounting for more than three-quarters of world trade, are projected at 1.65 million tons, down slightly from last year. Canada's exports are expected to continue large, encouraged by low U.S. production and higher U.S. oats prices. In the EU, exports by Finland may remain similar to last year, while Swedish exports are expected to wane due to lower production. Uncertainty remains, however, about the whether the EU will allow subsidized exports, and, if it does, how much.

An Examination of U.S. Corn Area by Region, 1975-94

by Sara J. Schwartz [1]

Abstract: Corn acreage patterns have shifted over the last 20 years. While most corn is still produced in the Midwest, less is produced in the South and more is grown in Plains States. Greater planting flexibility is expected under the 1995 farm legislation. Future area shifts will depend on corn's competitiveness with soybeans and how much corn will be planted on land formerly idled under government programs.

Introduction

This article examines how U.S. corn acreage patterns have changed over the last 20 years. State and regional data reveal changes in the location of production, shifts of acreage from corn into other crops, from other crops into corn, and where and why land tends to be idled.

In 1996, strong prices are expected to coax the most acreage into corn production since the mid-1980s. Future changes in farm policy are likely to lead to increased flexibility in farm programs, spurring great interest in how crop acreage might shift. Not all corn growing regions will respond to higher corn prices and changing government programs in the same way. Demand for corn is expected to remain strong over the next 10 years, both domestically and globally. The United States will be the primary supplier for the international market. Although U.S. corn yield growth has been impressive, there are concerns about the amount of land available if demand increases sharply. The conditions in different regions that might encourage farmers to plant corn and reduce idled corn acreage in the coming years will be examined.

U.S. Acreage Patterns: Relatively Stable in the Corn Belt, Shifts in Other Regions

More acreage is planted to corn than any other U.S. crop. An average of 75.5 million acres was planted annually between 1990 and 1995, including an average (1990-94) of 6.1 million acres harvested for silage. Corn has maintained a relatively constant share of U.S. cropland (ranging from 20 to 24 percent since 1975). However, current acreage is relatively low by historical standards. Since the late 1970s, planted acreage has declined 5 percent (nearly 4 million acres), or about 0.7 percent annually. Over half of the decline can be accounted for by reduced planting for silage. Production continues to rise because of improved yields. Yields have increased an average 1.5 percent a year since 1975 because of improved technology and production practices.

Production is centered in the Corn Belt (Iowa, Illinois, Indiana, Ohio, and Missouri) and the Lake States (Minnesota, Wisconsin, and Michigan). The two regions have accounted for nearly two-thirds of U.S. corn acreage and nearly 70 percent

Figure A-1

U.S. Corn Planted Acres and Yields

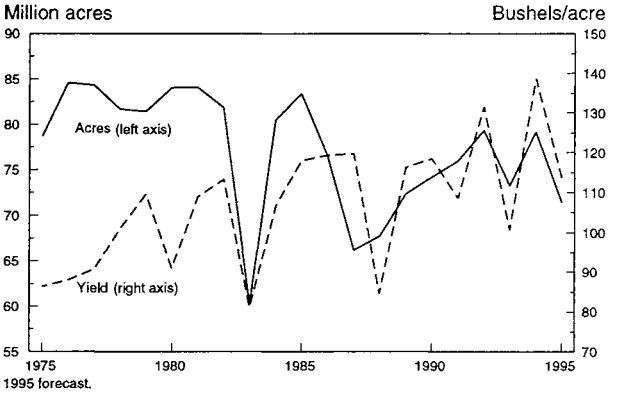


Figure A-2

U.S. Corn Production

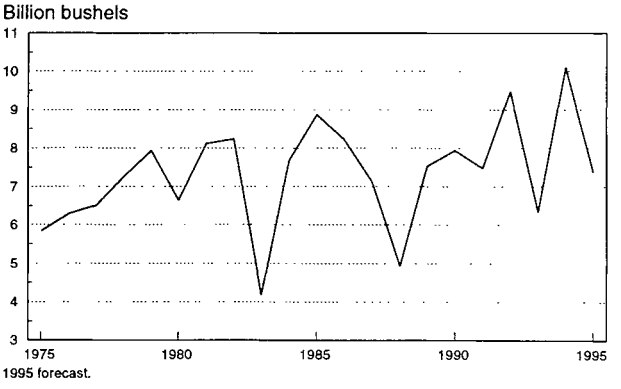
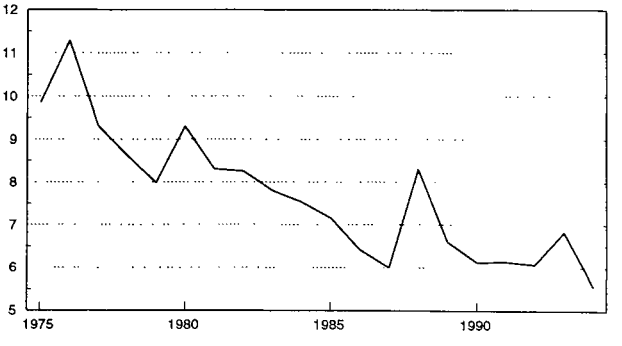


Figure A-3

U.S. Corn Acreage Harvested for Silage



[1] Agricultural economist, Commercial Agriculture Division, Economic Research Service.

of U.S. production since 1975. While planted corn area has declined in the Corn Belt and Lake States since the late 1970s, their share of U.S. corn acreage and production has remained relatively stable.

But shifts have occurred in the other areas of the country. Production in the Plains States (Nebraska, Kansas, South Dakota, North Dakota, South Dakota, Oklahoma, and Texas) has been expanding, while production in southern States (Alabama, Georgia, South Carolina, Florida, North Carolina, Tennessee, Kentucky, Virginia, West Virginia, Louisiana, Mississippi, and Arkansas) has contracted. Over the last 20 years, however, the acreage declines in the South have been greater than the acreage increases in the Plains States.

In the Corn Belt and Lake States, soybeans and corn are usually grown in rotation. Wheat can also be part of the rotation. The major decrease in area in recent years appears to be due to an increase in idled land, not to shifts to other crops. In the Plains States, land is shifting from sorghum and wheat into corn and soybeans. In the South, a large proportion of corn base acres has been idled under government programs, and wheat and soybeans, grown in rotation or double-cropped, and cotton serve as the primary crop alternatives.

Corn area in the United States was relatively stable in the 1960s, but surged in the 1970s when global demand expanded and prices rose. In the mid-1980s, area contracted in response to declining prices, high acreage reduction program requirements (ARPs), and other programs designed to idle grain area. Acreage recovered somewhat after the 1988 drought depleted stocks and prices generally began to strengthen. Now, it appears the United States is again entering a period of acreage expansion in response to strong global demand and relatively high prices.

USDA has projected that U.S. corn acreage would rise to 80.5 million acres by 2000 and to 82.3 million by 2005 (1). This would return acreage to the levels of the mid-1980s. Most of the additional acreage is expected to come from reduced enrollment in the 0/85-92 program, less area under contract in the Conservation Reserve Program (CRP), and fewer acres flexed to other crops.

The Role of Government Programs

Since 1956, the government has attempted to reduce surplus production by offering various program incentives to idle land (2). In the late 1970s, deficiency payments and set-asides were based on how much acreage producers chose to plant to any given crop. Prices were strong, few acreage restrictions were in place, and corn acreage expanded.

That kind of flexibility was greatly reduced when the ARP was established under the 1981 farm legislation. Crop-specific bases were established and the base was equal to the average acreage planted or considered planted to a given crop in the previous 2 years. To receive loans, deficiency payments, and other program benefits, producers had to abide by any acreage reduction requirement and other restrictions. The ARP requirement was applied as a uniform percentage reduction from the acreage base of each farm. Therefore, the larger the base, the more acres would be eligible to be planted (3).

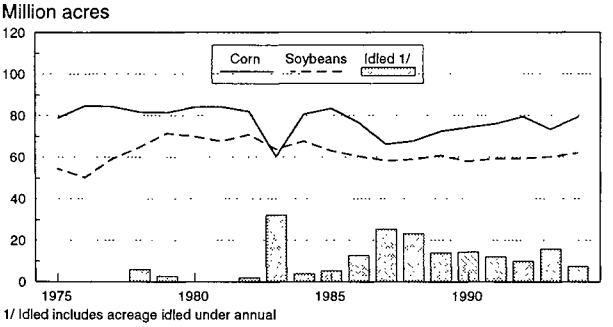
The 1985 farm legislation tightened flexibility even further because base acres were determined by an average of acres planted or considered planted to a specific crop in the previous 5 years instead of the previous 2 years. The 1990 farm bill left this provision intact, but provisions for increased planting flexibility were added (4).

Since 1985, producers could "build" base acreage only by not participating in the commodity programs for any crop on the farm for at least a year and then planting more acres than current base acres to the program crop for which they want to build base (5). Because this provision requires the producer to forego deficiency payments on all program crops grown on the farm for at least a year, it is a huge disincentive to expand base acreage of any program crop unless the net returns are high enough to offset the loss of government payments.

Until flexibility was introduced under the 1990 farm legislation, base acre restrictions also served as a disincentive to plant alternative crops on the base acres of the program crop. The cost of leaving the corn program to plant soybeans, for example, even for a year, could be very high. If a producer chose to do so, and returned to the corn program the following year, the base would be reduced and less acreage would be eligible to receive government support in the future (6).

Figure A-4

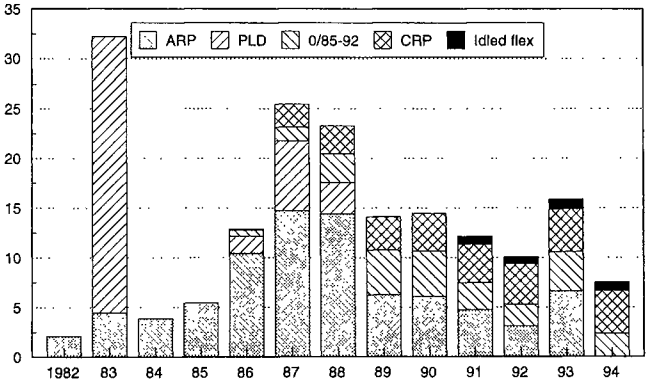
U.S. Corn and Soybean Planted Acres and Corn Base Idled



1/ Idled includes acreage idled under annual programs as well as under the long-term CRP.

Figure A-5

U.S. Idled Corn Base Acreage



Declining market prices in the 1980s encouraged producers to participate in government programs and abide by the acreage restrictions. Because net returns per acre for corn on land enrolled in government programs generally exceeded the net returns for land not participating (7), participation jumped from only 29 percent in 1982 to over 90 percent in 1987. For most of the 1990s, it has slipped to about 80 percent. Participation in the corn program is not as high as it is for wheat, cotton, and rice, but acreage enrolled is large, averaging nearly 65 million acres in the 1990s.

Several programs have given producers the option of idling land and still receiving some form of government support. An average of 12 million corn base acres per year between 1990 and 1994 were idled, or an average of 15 percent of total corn base. Even in 1994, when the corn ARP was 0 percent, nearly 10 percent (7.5 million acres) of corn base was idled under various other government programs.

In recent years, the three largest programs in which land has been idled have been the ARP, the 0/85-92 program, and the CRP (8). The ARP ranged from 5 to 10 percent between 1990 and 1993, idling between 3.1 and 6.6 million acres, as the government sought to adjust supply and control imbalances at a time when demand growth was sluggish. Tight supplies led to a 0 percent ARP in 1994, followed by 7.5 percent ARP in 1995. However, unlike the mid-1980s, when the ARP idled nearly 15 million acres, the ARP no longer accounts for the greatest share of land idled under government programs. Other programs, particularly the CRP and 0/85-92, have become increasingly important.

Will Idled Land Return to Production?

In 1996, producers are expected to expand corn acreage in response to strengthening prices. Some acreage will likely be shifted from soybeans to corn and some land currently enrolled in the 0/85-92 program will likely come back into production. The contracts for most of the land held under CRP are scheduled to expire in 1997 and 1998, but some CRP contracts are scheduled to expire in 1996 as well. Whether producers will use land idled under the 0/85-92 program or from the CRP for corn when contracts expire depends, in part, on the comparative returns producers expect to receive from competing crops. Those returns depend on each producer's cost of production, yields, price expectations for corn and those of alternative crops, especially soybeans, and expectations for government support.

The net return relationship between corn and competing crops, especially soybeans, has become more important since the 1990 farm legislation because producers are now allowed to flex up to 25 percent of their corn base into other crops without losing planting credit. Analysts often use a "break-even ratio" to estimate what the price for corn needs to be to yield the same return that soybeans would provide (9) and to determine whether producers will favor soybeans over corn on flex acres.

For the 1995/96 year, with a 7.5 percent ARP, a 2.8 to 1 soybean/corn price ratio would be required on normal flex acres or on nonparticipating acres for soybean net returns to break even with corn net returns. On optional flex acres, a 3 to 1 ratio would be required because those acres receive deficiency payments in addition to the market price. These price ratios are higher than the 2.5 to 1 ratio traditionally used because 1995/96 corn prices are so much higher than in previous years. The break-even ratio changes, depending on the price of corn. The higher the corn price, the higher the break-even ratio.

Soybeans are the major competing crop with corn in much of the country. Soybean planted acreage has averaged 60.1 million acres in the 1990s. Because they are commonly grown in rotation with corn, soybeans basically compete at the margin. That is, relatively small increases or decreases in total acreage planted to soybeans at the expense of corn are expected when price relationships change from year to year. It is not possible to directly measure the amount of substitution in a given year, but observing the amount of acreage flexed to soybeans serves as one indicator.

Net Returns Calculations (1)

Net returns influence producers' decisions regarding the use of their land. Producer returns influence decisions whether to enroll in farm commodity programs. Returns affect cropping choices among competing crops, including the use of planting flexibility provisions. Net returns for participants and non-participants are shown in table A-5. Net returns can also be calculated for normal flex acres and optional flex acres.

Below are general formulas used to calculate producer returns net of variable expenses for each of these four categories. All calculations used in this article are evaluated with State or regional averages of relevant variables. Also, calculations for participant returns assume all flex acreage remains in the original program crop.

Participant returns per acre:

(1 - ARP) [(price * yield) - variabe production costs]

+ (1 - ARP - 0.15) (deficiency payment rate * payment yield)

- ARP * variable costs of idled land

Nonparticipant returns per acre:

price * yield - variable costs

Normal flex returns per acre:

price * yield - variable costs

Optional flex returns per acre:

price * yield

+ deficiency payment rate * payment yield

- variable production costs

Table A-1--Base, planted, and idled corn acreage by region, 1978-94

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
								Million acres									
Corn Belt:																	
Base 1/	37.8	37.7	NA	NA	38.6	39.3	38.7	41.0	38.5	38.9	39.2	38.9	38.9	38.6	38.6	38.4	38.4
Participation rate (%)	NA	NA	NA	NA	26.0	71.0	58.0	72.3	98.0	93.0	90.4	82.0	78.9	77.5	77.3	83.1	83.7
Planted 2/	37.8	37.7	38.9	38.5	38.3	27.0	37.1	38.7	35.2	30.3	31.9	34.5	34.8	35.4	36.8	33.9	36.9
Total idled 1/	2.5	0.8	0.0	0.0	0.9	15.5	2.1	2.8	6.2	12.0	10.1	5.5	5.6	4.5	3.7	6.3	2.4
ARP	1.2	0.5	0.0	0.0	0.9	2.0	2.1	2.8	5.2	7.2	7.1	3.0	2.9	2.2	1.5	3.2	0.0
PLD	1.2	0.3	0.0	0.0	0.0	13.5	0.0	0.0	0.9	3.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
0-50/85-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.5	1.0	1.0	0.4	0.3	0.8	0.2
CRP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.1	1.3	1.5	1.7	1.8	1.9	2.0	2.0
Idled Flex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1
Lake States:																	
Base 1/	13.9	13.9	NA	NA	13.9	14.4	13.3	13.7	14.1	13.6	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Participation rate (%)	NA	NA	NA	NA	30.4	75.6	56.4	73.9	87.6	92.2	86.0	82.6	79.5	76.6	74.9	81.2	82.4
Planted 2/	13.9	13.9	11.4	15.4	14.9	10.5	14.5	14.7	13.0	11.3	11.3	12.1	12.8	13.0	13.8	12.1	13.3
Total idled 1/	1.1	0.6	0.0	0.0	0.4	5.9	0.7	1.0	2.2	4.3	4.0	2.5	2.5	2.1	1.7	3.1	1.3
ARP	0.6	0.3	0.0	0.0	0.4	0.8	0.7	1.0	1.8	2.4	2.3	1.1	1.1	0.8	0.5	1.1	0.0
PLD	0.6	0.3	0.0	0.0	0.0	5.1	0.0	0.0	0.3	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
0-50/85-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.8	0.8	0.4	0.3	1.0	0.3
CRP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.6	0.7	0.7	0.8	0.8	0.8
Idled Flex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.2
Plains States:																	
Base 1/	14.7	14.9	NA	NA	15.5	15.6	16.4	16.7	16.5	16.4	17.0	17.2	17.3	18.0	17.7	17.8	17.8
Participation rate (%)	NA	NA	NA	NA	46.5	80.3	63.5	77.7	89.4	94.8	91.9	87.4	86.4	87.0	85.2	89.1	89.3
Planted 2/	14.7	14.9	15.3	14.3	14.3	10.8	14.7	15.2	14.4	13.1	13.7	14.8	15.3	16.5	16.9	16.3	17.8
Total idled 1/	1.8	1.1	0.0	0.0	0.7	6.4	0.9	1.2	2.8	5.3	5.0	3.1	3.3	2.9	2.4	3.7	1.9
ARP	1.0	0.7	0.0	0.0	0.7	1.1	0.9	1.2	2.2	3.3	3.2	1.5	1.5	1.2	0.8	1.6	0.0
PLD	0.8	0.4	0.0	0.0	0.0	5.3	0.0	0.0	0.4	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
0-50/85-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.6	0.9	1.0	0.6	0.6	1.0	0.8
CRP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.7	0.8	0.8	0.8	0.8	0.8
Idled Flex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3
Southern States:																	
Base 1/	8.8	8.5	NA	NA	8.3	8.3	7.7	8.0	7.8	7.7	7.9	7.7	7.4	7.3	7.0	6.9	6.2
Participation rate (%)	NA	NA	NA	NA	13.7	60.9	20.1	37.6	64.7	77.1	71.8	58.1	58.8	56.3	56.7	62.8	56.6
Planted 2/	8.8	8.4	8.7	9.0	7.5	6.0	7.7	8.1	7.8	6.0	5.4	5.4	5.7	5.5	6.3	5.6	5.8
Total idled 1/	0.5	0.2	0.0	0.0	0.1	2.9	0.1	0.3	1.0	2.6	2.9	2.2	2.2	1.9	1.6	1.9	1.2
ARP	0.3	0.1	0.0	0.0	0.1	0.3	0.1	0.3	0.7	1.2	1.1	0.4	0.4	0.3	0.2	0.4	0.0
PLD	0.2	0.1	0.0	0.0	0.0	2.6	0.0	0.0	0.1	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0
0-50/85-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.1	1.3	1.3	1.0	0.8	0.9	0.6
CRP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5
Idled Flex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Total U.S.:																	
Base 1/	81.7	81.4	NA	NA	81.3	82.6	80.8	84.2	81.7	81.5	82.9	82.7	82.6	82.7	82.1	81.8	81.5
Participation rate (%)	NA	NA	NA	NA	29.1	71.4	53.7	69.0	85.7	90.5	87.1	79.5	77.4	76.5	75.7	81.2	81.6
Planted 2/	81.7	81.4	84.0	84.1	81.9	60.2	80.5	83.4	76.6	66.2	67.7	72.3	74.2	76.0	79.3	73.2	79.2
Total idled 1/	6.1	2.9	0.0	0.0	2.1	32.2	3.9	5.4	12.9	25.5	23.3	14.1	14.5	12.1	10.1	15.9	7.5
ARP	3.2	1.7	0.0	0.0	2.1	4.4	3.9	5.4	10.4	14.7	14.4	6.3	6.1	4.7	3.1	6.6	0.0
PLD	2.9	1.2	0.0	0.0	0.0	27.8	0.0	0.0	1.8	7.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0
0-50/85-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.4	2.9	4.5	4.6	2.7	2.2	4.0	2.4
CRP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.3	2.8	3.4	3.8	3.9	4.1	4.3	4.3
Idled Flex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	1.0	0.9

Sources: 1/ Final Compliance Report, Commodity Credit Corp., USDA, various years.
2/ National Agricultural Statistics Service, USDA.

Table A-2--U.S. and selected States: Coefficients of variation for corn and soybean yields , 1975-94 1/

States	1975-94				1975-85				1985-94			
	Corn	Soybeans	Sorghum	Wheat	Corn	Soybeans	Sorghum	Wheat	Corn	Soybeans	Sorghum	Wheat
	Percent				Percent				Percent			
Georgia	29.5	22.3	18.9	16.9	30.3	21.5	19.3	11.2	19.9	22.1	17.4	19.4
North Carolina	16.9	12.0	14.6	17.2	18.7	10.3	15.9	12.2	14.0	9.7	12.5	17
Nebraska	14.4	17.3	16.5	11.3	12.5	17.1	13.2	9.1	7.1	13.5	15.8	13.1
Kansas	14.7	25.7	19.4	13.8	13.0	25.2	19.4	15	7.2	16.8	12.7	12.1
Iowa	18.2	13.1	NA	16.3	14.5	7.8	11.7	12.3	18.5	14.1	NA	20.1
Minnesota	20.9	15.2	NA	20.2	17.9	12.7	NA	17.1	19.3	16.3	NA	25.1
US	14.6	12.4	12.9	8.6	11.2	7.2	11.8	9.2	12.4	10.6	8.5	6.3

1/ Coefficient of variation, a measure of variablilty, equals the standard deviation divided by the mean.

Table A-3--U.S. Summary of corn flex acres

Year	NFA and OFA flexed to: Other program crops	Soybeans	Minor oilseeds	Other crops
	1,000 acres			
1991	576	2,772	29	201
1992	489	2,652	18	146
1993	544	2,990	43	146
1994	629	4,089	50	174

Year	Total NFA and OFA flexed	Other crops' NFA and OFA flexed to corn	Corn NFA remaining in corn	Total corn NFA flexed
	1,000 acres			
1991	3,578	474	5,557	3,128
1992	3,305	613	5,623	2,841
1993	3,724	722	5,571	3,319
1994	4,941	655	4,951	4,077

Year	NFA idled	Total NFA	OFA flexed	Total OFA	Net NFA and OFA flexed
	1,000 acres				
1991	808	9,493	450	6,328	3,104
1992	722	9,323	465	6,216	2,693
1993	996	9,976	404	6,651	3,002
1994	864	9,979	864	6,653	4,286

Source: Final Compliance Report, Commodity Credit Corp., USDA, various years.

Table A-4--Corn flex acres planted to soybeans, set-aside, and soybeans-to-corn price ratios, 1991-95

Year	Acres flexed to soybeans 1/	Corn ARP	December corn futures price in Mar.-Apr.	November soybean futures price in Mar.-Apr.	Soybeans to corn price ratio
1991	2.8	7.5	2.62	6.18	2.36
1992	2.7	5.0	2.61	6.08	2.33
1993	3.0	10.0	2.43	6.01	2.47
1994	4.1	0.0	2.60	6.36	2.45
1995	2.8	7.5	2.61	6.01	2.30

1/ Sources: 1991-94 Final Compliance Reports, Commodity Credit Corp., USDA, various years. 1995 Enrollment Report, Commodity Credit Corp., USDA, June 1995.

Impact of Increased Flexibility Since 1990

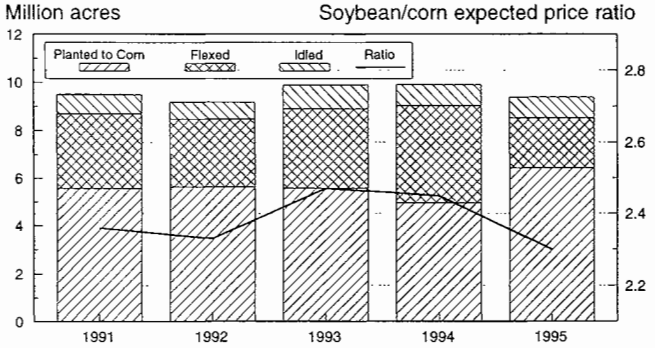
Under the 1990 farm legislation, deficiency payments were no longer provided on 15 percent of the producer's base, called normal flex acres (NFA). Producers were also allowed to flex an additional 10 percent of their base, called optional flex acres (OFA), to alternative crops. However, if producers choose to flex to an alternative crop on OFA, they lose deficiency payments on those acres.

The response to the flex program has been limited. Only an average of 24 percent of NFA and OFA flexed to alternative crops each year between 1991 and 1994. In 1994, producers flexed 4.1 million acres of corn base into soybeans, even though the soybean/corn expected price ratio at planting was only 2.45 (based on the average December futures corn price and the November futures soybean price in March and April 1994). In March 1995, producers indicated they would plant only 6 percent less soybean acres than the year before. At the time, the soybean/corn expected price ratio was 2.3 to 1. Based on the average December futures prices for corn in March and April ($2.61 per bushel), the farm price of soybeans would have had to exceed $7.00 per bushel on OFA and more than $6.50 per bushel on NFA to match the returns to corn. The average futures price in March and April for the November soybean contract was only $6.01 per bushel, leading many to forecast that the drop in soybean acreage would be steeper.

Weather and agronmomics may be as important as the soybean/corn price relationship in the selection of crops planted on flex acres. Flooding in 1993, exceptional planting weather in 1994, and wet weather at planting in 1995 likely had a strong influence on producers' planting choices. In recent years, soybean yields have shown great resiliency, which may be attractive to producers. But trend yield growth for corn and soybeans is similar and, over the last 20 years, there has not been a statistically significant difference in soybean and corn yield variability at the national level and in most States analyzed in this article.

Figure A-6

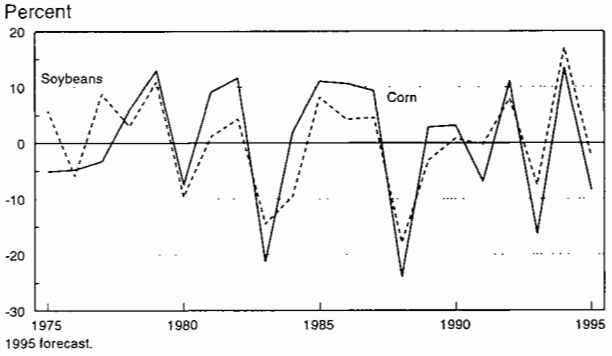
U.S. Corn Normal Flex Acres



Based on January to April program sign-up as reported by the Commodity Credit Corporation in June 1995.

Figure A-7

Percent Deviation from Trend
U.S. Corn and Soybean Yields



1995 forecast.

Producers in different regions have experienced diverse reactions to market conditions and therefore have responded differently to government programs that enable them to idle land or flex to alternative crops. Examining acreage shifts on a regional basis may provide some clues as to how producers in different regions will respond to changes in market prices and government support in the future.

Regional Shifts

Production decisions are made based on soil conditions, producers' price expectations, input costs, rotational practices, environmental factors, and conservation compliance requirements. Aggregating the results of individual decisions to the State and regional level disguises the myriad of outcomes faced by each producer. And the lack of detailed cost of production data adds to the problem. In this study, regional cost of production data (10) were applied to each State in the region, even though cost of production in each State and county certainly varies. The cost of production data average costs across the region and therefore do not separate out the costs of irrigated versus non-irrigated land.

Net return data between 1989 and 1994 by State (7) indicate that net returns per acre for corn are generally higher than any other program crop, except cotton and rice. But those data do not reveal that weather and soil conditions dictate that corn can only be grown in certain parts of a given State, or that higher input costs in the spring might encourage producers to plant crops that require less cash outlay, or that corn's high yield variability might discourage farmers from planting corn in favor of less risky crops even if prospective returns might be higher for corn.

While the national picture is fairly stable, some definite regional shifts have occurred and some general trends can be discerned. The share of national production in the Corn Belt and the Lake States has declined slightly from 71 percent in the late 1970s to an average of 68 percent between 1991 and 1994. The share of production coming from the South has dropped from 7 percent to 6 percent, and the share from the Plains States has risen from 16 percent to 21 percent (11).

In the late 1970s, southern States accounted for an annual average of over 10 percent of total U.S. corn planted acreage and the Plains States accounted for 18 percent. Between 1991 and 1994, the South accounted for an average of only 7 percent of acreage, planting 3 million fewer acres of corn than in the late 1970s. The Plains States increased corn area over 2 million acres during the same period, and accounted for 22 percent of planted acreage.

Strong Incentives To Idle Southern Corn Acreage

Producers in the South have a stronger incentive to idle land under government programs or shift production to other crops. Corn yields in the South are significantly lower than the national average and more variable, production costs are among the highest in the country, and the net returns, even for those participating in government programs, are the among the lowest in the country. Returns for those not participating are even lower. Some corn area has shifted into cotton and hay, and more entered the CRP.

When both soybean and corn prices dropped in the mid-1980s, producers began idling land under a variety of government programs. For example, between 1987 and 1989, the corn base idled under government programs in the Southeast (Georgia, Alabama, South Carolina, and Florida) was the equivalent of nearly 70 percent of the total corn acreage planted in the region. Between 1991 and 1994, the average planted corn acreage in the South (5.8 million acres) accounted for 7.5 percent of total U.S. corn acreage. But an average of 15 percent of corn base idled under government programs (1.6 million acres) was in the South, even though participation rates in the corn programs in southern States are among the lowest in the country.

The changes that occurred in Georgia and North Carolina demonstrate why the shifts occurred. In the late 1970s, Georgia was the South's largest corn producing State. But by 1994, Georgia's planted corn acreage was only 26 percent of its peak in 1976. In the late 1970s and early 1980s, soybean prices soared and producers increased some soybean acres at the expense of corn. However, most of the increase in soybean acres came from more double-cropping of wheat and soybeans that did not necessarily compete directly with corn. When soybean and corn prices plunged in the mid-1980s, corn base acreage that remained enrolled in the corn program began to be shifted into programs that provided support for idled land. By 1994, more than 25 percent of corn base in Georgia

Table A-5--Comparison of participant and non-participant net returns for corn, soybeans, wheat, sorghum, and cotton in the U.S. and selected States 1/

	Corn participant returns	Corn non-participant or NFA returns	Soybeans returns	Wheat participant returns	Wheat non-participant or NFA returns	Sorghum participant returns	Sorghum non-participant or NFA returns	Cotton participant returns	Cotton non-participant or NFA returns
					$/harvested acre				
Georgia:									
1989	133.25	112.67	57.66	39.52	34.78	48.66	31.93	199.36	182.93
1990	70.17	47.19	-5.18	63.03	22.92	19.39	3.15	164.22	138.88
1991	129.53	119.41	58.73	28.83	-2.34	48.72	42.93	296.45	252.96
1992	112.22	78.96	67.29	75.78	56.35	57.53	39.32	301.12	217.33
1993	46.63	38.97	19.29	42.89	11.46	7.81	1.60	201.17	109.75
1994	135.90	104.12	72.03	84.68	65.96	63.59	45.03	346.28	365.68
Iowa:									
1989	171.75	125.37	143.45	97.51	98.72	NA	NA	NA	NA
1990	180.93	143.59	166.35	93.99	53.85	NA	NA	NA	NA
1991	170.61	145.81	153.75	35.27	3.68	NA	NA	NA	NA
1992	221.89	162.59	172.72	61.99	41.11	NA	NA	NA	NA
1993	80.58	64.32	125.78	3.65	-28.74	NA	NA	NA	NA
1994	256.71	199.93	202.89	79.97	60.58	NA	NA	NA	NA
Kansas:									
1989	195.91	155.61	84.58	49.11	44.87	68.88	41.58	31.82	3.05
1990	195.00	163.76	77.15	92.93	55.88	86.26	67.07	28.37	9.05
1991	159.91	137.72	64.94	71.50	47.85	68.22	57.94	42.75	16.42
1992	214.57	159.12	137.87	79.20	60.51	103.70	75.43	-47.24	-108.45
1993	156.04	150.47	117.06	88.67	58.56	82.32	75.66	4.25	-54.67
1994	221.58	168.86	128.63	95.80	77.97	99.87	71.24	283.82	306.99
Minnesota:									
1989	172.99	134.52	128.85	94.42	93.75	NA	NA	NA	NA
1990	166.29	134.21	149.15	119.15	77.89	NA	NA	NA	NA
1991	161.65	140.86	127.90	83.01	56.44	NA	NA	NA	NA
1992	141.62	86.33	105.60	131.89	112.89	NA	NA	NA	NA
1993	44.42	27.32	71.38	90.76	56.79	NA	NA	NA	NA
1994	213.87	163.73	146.84	67.18	47.01	NA	NA	NA	NA
North Carolina:									
1989	130.88	102.62	63.26	36.94	31.98	54.50	31.49	168.26	155.77
1990	61.68	30.87	50.78	79.11	40.22	48.53	29.52	200.99	189.25
1991	100.52	83.41	71.01	57.10	31.14	46.67	37.33	194.55	155.74
1992	104.56	62.66	56.04	94.05	75.79	54.32	29.33	185.28	110.88
1993	33.13	20.82	62.29	61.14	29.88	15.25	7.14	143.66	68.05
1994	106.03	67.37	70.48	75.97	57.41	53.74	29.77	322.37	343.99
Nebraska:									
1989	192.37	152.66	111.33	60.06	56.36	95.99	61.02	NA	NA
1990	194.72	163.10	133.93	91.36	51.62	118.17	92.94	NA	NA
1991	164.92	142.52	121.02	76.53	51.44	96.35	83.21	NA	NA
1992	176.06	118.77	162.87	69.52	48.89	137.55	101.72	NA	NA
1993	110.12	99.35	160.78	92.00	59.96	74.79	64.45	NA	NA
1994	205.66	152.51	185.63	87.14	68.17	141.07	104.56	NA	NA
United States:									
1989	179.61	141.05	112.54	70.18	68.63	73.14	45.01	182.23	174.35
1990	168.44	135.97	126.04	87.44	50.46	83.78	62.98	223.74	214.89
1991	142.37	119.50	118.08	73.53	50.57	69.17	58.49	181.08	141.84
1992	186.59	132.68	135.74	91.98	74.06	90.29	60.35	236.84	164.27
1993	121.61	112.81	137.24	100.76	70.64	68.19	60.51	208.15	133.02
1994	220.19	169.08	153.52	92.52	74.68	103.42	73.73	263.35	276.31

1/ See box for methodology.

remained idle under government programs even though there was no ARP requirement. Idled acreage was enrolled mostly in the CRP (44 percent) and the O/85-92 program (49 percent). And, as the boll weevil eradication program expanded and cotton prices strengthened, producers began substituting cotton for both corn and soybeans.

In the 1990s, cotton production in Georgia expanded sharply, but producers appear to have taken more soybeans and wheat than corn out of production to plant cotton. Cotton is now the dominant field crop in Georgia, but since 1986, corn has appeared to be a more attractive alternative to soybeans, with planted corn acreage exceeding that of single-cropped soybeans. In 1992, corn acreage exceeded total soybean acreage (including those double-cropped) for the first time since 1977.

One reason may be that corn yields in Georgia have been increasing an average of 4 percent per year, while soybean yields have increased less than 1 percent per year. Corn yields may have risen because the share of Georgia's planted corn acreage that is irrigated rose from about 10 percent in 1978 to nearly 25 percent by 1992 (12). Irrigated acreage has expanded 5 percent since 1978, but non-irrigated corn acreage has dropped sharply.

Georgia's net returns per acre for corn in the 1990s (except for 1990) on acres enrolled and not enrolled in the corn program have consistently exceeded the net returns for single-cropped wheat and soybeans. This may explain why an average of only 12 percent of eligible corn acreage flexes to soybeans annually.

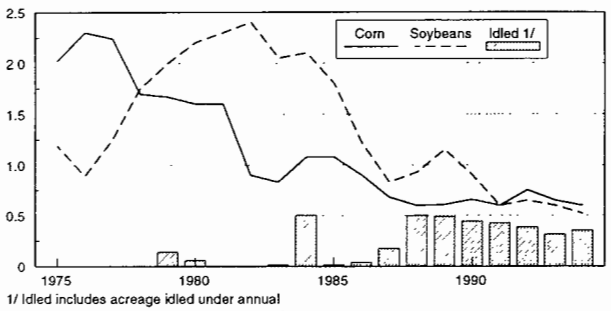
Corn production in North Carolina followed a pattern similar to Georgia, but the decline in corn acreage has not been as severe. Planted corn acreage in 1994 and 1995 was about 50 percent less than in 1976. And while cotton has made inroads into corn and soybean acres in the 1990s, cotton remains a relatively minor crop. A smaller proportion of corn base is idled under government programs in North Carolina than in Georgia (about 12 percent in 1994), with most of it (78 percent) in the 0/85-92 program.

Strong feed demand resulting from North Carolina's burgeoning large scale hog production has not raised corn prices high

Figure A-8

Georgia: Corn and Soybean Planted Acres and Corn Base Idled

Million acres

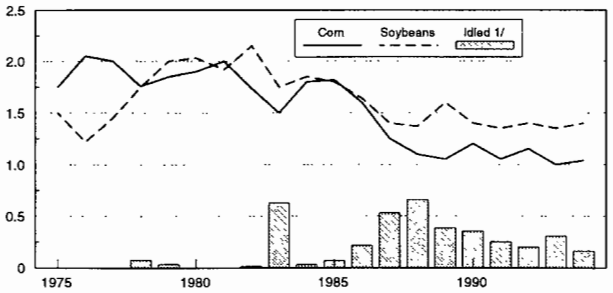


1/ Idled includes acreage idled under annual programs as well as under the long-term CRP.

Figure A-9

North Carolina: Corn and Soybean Planted Acres And Corn Base Idled

Million acres



1/ Idled includes acreage idled under annual programs as well as under the long-term CRP.

enough to stimulate increased corn production. Corn yields in North Carolina have grown much slower than in Georgia (about 1.2 percent annually) but show less variability. However, corn yields remain much more variable than soybean yields. And, in recent years, soybean net returns have been higher than corn net returns on acreage not receiving program benefits. This may explain why corn acreage is still trending down while soybean acreage has been relatively stable since 1990.

Between 1991 and 1994, producers flexed about 25 percent of eligible flex acres from corn to soybeans every year, compared to a national average of 19 percent. With good transportation links between North Carolina and the Corn Belt dampening potential incentives to expand local production, price incentives to North Carolina producers may not be high enough to encourage producers not participating in government programs to expand corn acreage nor to persuade producers in the program to plant more corn on flex acres or enroll less corn base in the 0/85-92 program.

Plains States' Production Expanding

In the Plains States, area has shifted from wheat, sorghum, and cotton (mostly in Texas) into both corn and soybeans. The shift from sorghum to corn was especially accentuated in Kansas, Nebraska, and Texas when producers' corn and sorghum bases were combined and producers were allowed to plant any mix of corn and sorghum without losing base history or payments. Most flex acres in the region are still planted to corn. But between 1991 and 1994, an average of 12 percent shifted to soybeans annually and 11 percent was idled. About 40 percent of the corn area in the Plains States is irrigated (12) and accounts for the greatest use of irrigated land in the region. As a result, average yields in the region, while generally lower than the national average, vary less than in other parts of the country. And yields on irrigated land in the Plains States range from 18 percent higher than on non-irrigated area in Nebraska to 73 percent higher in Texas (12).

However, while the Plains States now account for 22 percent of planted corn acreage, they have a greater proportion of corn base idled in the 0/85-92 program, mostly in North Dakota and South Dakota. Each year since 1991, Plains States' corn base idled under this program has totaled more than 700,000 acres, or more than 25 percent of the U.S. total. The Plains

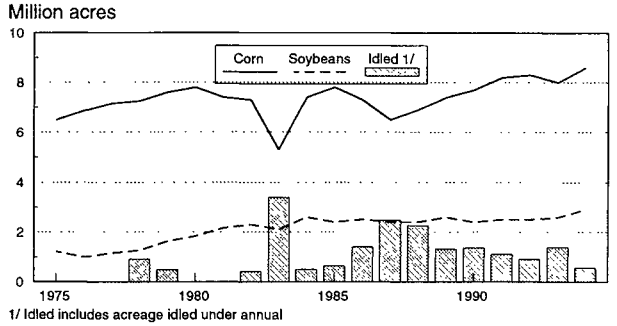
Table A-6--Irrigated cropland and corn acres by region

	Total irrigated cropland 1/	Irrigated cropland planted to corn 1/	Irrigated cropland planted to corn	Corn planted acres 2/	Corn planted acres irrigated
	1,000 acres	1,000 acres	Percent	1,000 acres	Percent
Corn Belt:					
1978	676	336	49.7	37,820	0.9
1982	820	346	42.2	38,310	0.9
1987	1,037	456	44.0	30,300	1.5
1992	1,423	678	47.6	36,800	1.8
Lake States:					
1978	733	323	44.1	13,850	2.3
1982	860	386	44.9	14,850	2.6
1987	954	374	39.2	11,250	3.3
1992	1,067	412	38.6	13,800	3.0
Plains States:					
1978	16,486	6,572	39.9	14,740	44.6
1982	15,321	5,975	39.0	14,270	41.9
1987	13,424	5,769	43.0	13,060	44.2
1992	14,973	6,892	46.0	16,850	40.9
Southern States:					
1978	5,392	254	4.7	8,820	2.9
1982	5,621	305	5.4	7,465	4.1
1987	6,414	293	4.6	5,990	4.9
1992	7,392	368	5.0	6,075	6.1
U.S.:					
1978	50,838	8,779	17.3	81,675	10.7
1982	49,002	8,466	17.3	81,857	10.3
1987	46,386	8,003	17.3	66,200	12.1
1992	49,404	9,664	19.6	79,311	12.2

1/ Census of Agriculture, Geographic Area Series, United States Summary and State data, various years.

Figure A-10

Nebraska: Corn and Soybean Planted Acres And Corn Base Idled



1/ Idled includes acreage idled under annual programs as well as under the long-term CRP.

States also have proportionately more corn acreage in idled flex acreage (about a third of the U.S. total or nearly 300,000 acres annually since 1991), mostly in Nebraska.

Nebraska has ranked as the third largest corn producer in recent years. Nearly 60 percent of Nebraska's corn crop is irrigated, accounting for about 75 percent of Nebraska's total irrigated crop acreage (12). Program participation is very strong, averaging 91 percent since 1985. Base acreage has been increasing and, by 1994, was up 750,000 acres from the 1982 enrollment (13). Soybean and pasture acreage also has been rising, while wheat and sorghum acreage has been falling since 1989.

Yields are likely playing a strong role in acreage shifts. Corn yields in Nebraska have been increasing faster than the national average at about 1.9 percent annually since 1975. Wheat yields have not shown much growth and sorghum has increased only 1.2 percent per year. Net returns per acre for corn grown on participating acreage since 1989 have averaged over twice those for wheat, one and a half times those of sorghum, and nearly 20 percent higher than for soybeans.

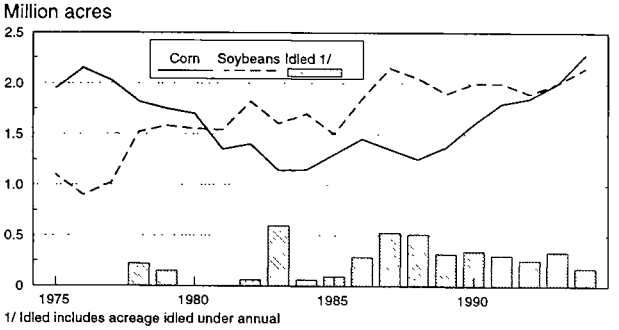
In most years, the ARP has accounted for most of the corn base idled under government programs in Nebraska. But in 1994, when there was no ARP, only 7 percent of Nebraska's corn base was idled, split mostly between the 0/85-92 program and the CRP. Idled NFA has never exceeded 10 percent of total corn NFA and area flexed to soybeans is also small.

Kansas is the ninth largest U.S. corn producer and the third largest among the Plains States, but its planted corn area has increased steadily from 1.35 million acres in 1987 to 2.3 million in 1994. Kansas' corn acreage base has also expanded about 400,000 acres (13) and participation in the program averaged 87 percent between 1985 and 1994. The expansion in corn area and pasture (12) occurred as producers reduced acreage planted to wheat and especially sorghum, which has dropped 900,000 acres since 1989. Like Nebraska, nearly 60 percent of Kansas' corn acreage is irrigated. Kansas farmers have been increasing irrigated corn acreage in the 1990s by reducing irrigated sorghum acreage (12).

Corn base idled under government programs accounted for less than 9 percent of the Kansas corn base in 1994. As in Nebraska, ARP acreage accounted for about half of the idled acreage prior to 1994, with the CRP and 0/85-92 together accounting for less than 200,000 acres. Kansas producers tend to idle a greater proportion of NFA (about 20 percent versus 10 percent in Nebraska), but like Nebraska, flex only a small proportion of NFA and OFA (less than 15 percent) to soybeans. Since 1990, net returns per acre for corn in Kansas have been over twice those for wheat and sorghum for program participants and nonparticipants.

Figure A-11

Kansas: Corn and Soybean Planted Acres and Corn Base Idled



1/ Idled includes acreage idled under annual programs as well as under the long-term CRP.

Acreage Shifts in the Corn Belt Are Minor

Even though the largest shifts in percentage terms have occurred in the South and in the Plains States, most U.S. corn is planted in the Corn Belt and in the Lake States. Because more than 60 percent of the acreage and nearly 70 percent of production come from those two regions, very small percentage changes in land use there can have large impacts on corn supply and prices.

Area planted to corn in the Corn Belt and Lake States has dropped about 6 percent (about 3 million acres) since the late 1970s, much of it because of reduced planting for silage. The average of 6.3 million acres of corn base idled under government programs each year in the Corn Belt and Lake States between 1991 and 1994 represented over 50 percent of total U.S. idled corn base. The greatest proportion of the idled corn base since 1991 has been in the CRP. Corn base enrolled in 0/85-92 and idled flex represents a very small proportion of corn base idled under government programs in the Corn Belt. This is because net returns to corn are among the highest in the country because of high yields and relatively low per bushel costs.

Lake States producers have idled a much larger proportion of corn base under government programs, mainly because there is more marginal land in the Lake States. This is reflected in producers' net returns, which are generally lower than in the Corn Belt. Yields in the Lake States are about 20 percent lower than in the Corn Belt and have not been rising as fast.

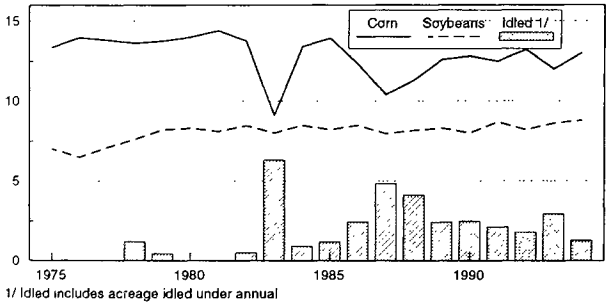
Iowa produces more corn than any other State in the country. Planted acreage is the highest. As in other States, corn acreage has dropped since the late 1970s and early 1980s, falling from a peak of 14.4 million acres in 1981 to 13 million in 1994. Enrollment of corn base in the CRP and a slow shift to soybeans account for much of the decline. Soybean acreage increased sharply in the late 1970s, remained relatively flat during the 1980s, and began trending upwards again in the 1990s when producers began flexing NFA acres to soybeans.

Iowa corn producers have flexed an average of 23 percent of eligible flex acres to soybeans since 1991, with 31 percent flexed in 1994. In recent years, net returns per acre for corn

Figure A-12

Iowa: Corn and Soybean Planted Acres and Corn Base Idled

Million acres

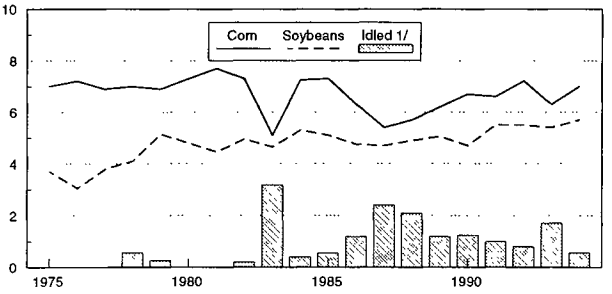


1/ Idled includes acreage idled under annual programs as well as under the long-term CRP.

Figure A-13

Minnesota: Corn and Soybean Planted Acres and Corn Base Idled

Million acres



1/ Idled includes acreage idled under annual programs as well as under the long-term CRP.

on land enrolled in the program consistently exceeded those for soybeans. However, the returns per acre on land not receiving deficiency payments are lower, falling slightly below the returns to soybeans in most years since 1990.

Iowa has one of the lowest rates of corn base idled in the 0/85-92 program, reflecting producers' high corn net returns compared to producers in other States. But Iowa has the most corn base acreage enrolled in CRP, nearly 25 percent of the national total. This summer, producers were allowed to take an "early-out" of their CRP contracts. Nationwide, only 651,000 acres came out of the CRP, with 25 percent from Iowa.

Minnesota is the Lake States' largest corn producer and the fourth largest nationally. Like Iowa, Minnesota's planted corn area has declined about 10 percent from its 1981 peak of 7.7 million acres. About half that acreage was moved into the CRP in the late 1980s. Soybean area has been increasing in the 1990s, exceeding the 1984 peak of 5.3 million acres in most years. While some of the increase has resulted from corn area flexed to soybeans, corn acreage, too, has been recovering from the lows of the mid-1980s. Acres planted to barley, oats, hay, and pasture (12) have all dropped since the mid-1980s with both corn and soybeans likely benefiting.

In Minnesota, net returns per acre for corn enrolled in the program are higher than for most other field crops. However, net returns for corn acreage not eligible for government support have fallen short of soybeans in 3 of the last 6 years.

Like Iowa, over 20 percent of eligible flex acres in Minnesota have been flexed to soybeans in most years, with nearly 25 percent flexed in 1994. And, as in Iowa, very little NFA is idled. But much more acreage is enrolled in the 0/85-92 program. In 1994, land enrolled in the 0/85-92 program accounted for nearly 20 percent of corn base idled under government programs in Minnesota, compared to only 2 percent in Iowa. Lower yields, higher variability, and lower net returns, and a greater share of marginal land compared to Iowa are likely contributing to greater use of the 0/85-92 program in Minnesota.

Prospects for the Future

It is uncertain if or how the 1995 farm legislation, yet to be finalized, will affect spring planting decisions in 1996. However, directions of change can be inferred from current market conditions. Season average farm prices in 1995/96 for corn are forecast to be the highest since 1983/84. Ending stocks will be the lowest in about 20 years, and the stocks-to-use ratio is projected to be among the lowest ever. At the same time world demand is very strong. While the prices of other feed grains, wheat, and soybeans are also forecast up, the tight world corn market would indicate that relatively high prices are likely to be sustained for corn more than for other crops in the coming years. Therefore, U.S. corn area is expected to expand.

In February 1995, USDA projected 0-percent ARPs for 1996 through 2005, and showed more modest demand for 1995 than currently being experienced, as well as larger global supplies (1). Most of the acreage gain was forecast to come from the 0-percent ARPs. But higher prices will likely coax even more acreage into production than what was projected in the baseline. Less NFA will be idled, less land will be enrolled in the 0/85-92 program, and, as contracts expire on CRP, some of the least marginal land is likely to return to production.

Plains States, which heavily use the 0/85-92 program and where irrigation reduces yield variation, are likely to expand area the most to take advantage of the higher prices. In the Southeast, cotton is likely to remain an attractive alternative to corn, and given corn's high cost, low yields, and strong variability, only a small expansion there in response to higher prices can be expected. In the Corn Belt, if the soybean/corn price ratio at planting favors corn, more flex acreage is likely to be planted to corn than flexed to soybeans.

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3. "Provisions of the Agriculture and Food Act of 1981," James Johnson, Richard Rizzi, Sara Short, and R. Thomas Fulton, Economic Research Service, USDA, Staff Report No. AGES811228, January 1982.

4. Comparison of Commodity and Conservation Provisions for the 1985 and 1990 Farm Bills Titles I -XI, XIV, USDA, ASCS, November 23, 1990.

5. "Understanding USDA's Crop/Commodity Programs," Craig Jagger and Joy Harwood. January 1995.

6. Glauber, Joe. "Why Aren't Farmers Moving to Soybeans?," *Agricultural Outlook*, AO-142, USDA, ERS, June 1988, pp.13-16.

7. See Box

8. The ARP requires program participants to set aside a portion of their crop base in return for receiving deficiency payment on the remaining permitted planted acreage. The 0/85-92 program allows producer to devote all the permitted acreage for a commodity to conservation uses and receive 85-92 percent of projected deficiency payments. The Conservation Reserve Program (CRP) is a longer term program that allows producers to bid for the opportunity to enroll environmentally sensitive land. Producers whose bids are accepted receive annual rental payments for 10 years in return for keeping the land in conservation uses for that period of time, but forgo receiving deficiency payments on that land. For a full description of these programs see "Feed Grains: Background for 1995 Farm Legislation," William Lin, Peter Riley, and Sam Evans, USDA, ERS, AER No. 714, April 1995.

9. Westcott, Paul and Joe Glauber. "A Net Returns Analysis of the Flexible Plantings Provision for Soybeans and Sunflowers, " *Oil Crops Situation and Outlook Report*, USDA, ERS, OCS 20, January 1989.

10. "Economic Indicators of the Farm Sector, Costs or Production—Major Field Crops & Livestock and Dairy," 1992, USDA, ERS, *ECIFS* 12-3, August 1994.

11. Production in other parts of the country make up the balance.

12. 1992 Census of Agriculture. AC92-A-51. Vol. 1, Geographic Area Series, United States Summary and State data, Dec. 1994.

13. About half the increase occurred prior to the 1985 farm legislation and about half occurred afterwards.

14. All the increase has occurred since the 1985 farm legislation.

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Appendix table 1--Corn, sorghum, oats, barley: Farm price, planted acreage, harvested acreage, production, and yield, 1951 to date 1/

Year beginning Sept. 1	Corn					Sorghum				
	Farm price	Planted acreage	Harvested for grain	Production	Yield per harvested acre	Farm price	Planted acreage	Harvested for grain	Production	Yield per harvested acre
	$/bu.	---1,000 acres---		1,000 bushels	Bushels	$/cwt.	---1,000 acres---		1,000 bushels	Bushels
1951	1.66	83,275	71,191	2,628,937	36.9	2.36	15,028	8,544	162,863	19.1
1952	1.52	82,230	71,353	2,980,793	41.8	2.82	12,289	5,326	90,741	17.0
1953	1.48	81,574	70,738	2,881,801	40.7	2.36	14,590	6,295	115,719	18.4
1954	1.43	82,185	68,668	2,707,913	39.4	2.25	20,148	11,718	235,575	20.1
1955	1.35	80,932	68,462	2,872,959	42.0	1.74	23,921	12,891	242,638	18.8
1956	1.29	77,828	64,877	3,075,336	47.4	2.05	21,384	9,209	204,881	22.2
1957	1.11	73,180	63,065	3,045,355	48.3	1.74	26,886	19,682	567,506	28.8
1958	1.12	73,351	63,549	3,356,205	52.8	1.78	20,675	16,524	581,012	35.2
1959	1.05	82,742	72,091	3,824,598	53.1	1.53	19,508	15,406	555,441	36.1
1960	1.00	81,425	71,422	3,906,949	54.7	1.49	19,598	15,601	619,954	39.7
1961	1.10	65,919	57,634	3,597,803	62.4	1.80	14,294	10,985	480,208	43.7
1962	1.12	65,017	55,726	3,606,311	64.7	1.82	15,060	11,571	510,284	44.1
1963	1.11	68,771	59,227	4,019,238	67.9	1.74	17,516	13,326	585,394	43.9
1964	1.17	65,823	55,369	3,484,253	62.9	1.88	16,770	11,742	489,796	41.7
1965	1.16	65,171	55,392	4,102,867	74.1	1.76	17,079	13,029	672,698	51.6
1966	1.24	66,347	57,002	4,167,608	73.1	1.82	16,372	12,813	714,992	55.8
1967	1.03	71,156	60,694	4,860,372	80.1	1.77	18,945	14,988	755,344	50.4
1968	1.08	65,126	55,980	4,449,542	79.5	1.69	17,793	13,890	731,277	52.6
1969	1.16	64,264	54,574	4,687,057	85.9	1.91	17,231	13,437	729,919	54.3
1970	1.33	66,863	57,358	4,152,243	72.4	2.04	16,957	13,568	683,179	50.4
1971	1.08	74,179	64,123	5,646,260	88.1	1.86	20,547	16,142	867,997	53.8
1972	1.57	67,126	57,513	5,579,832	97.0	2.45	17,035	13,212	801,350	60.7
1973	2.55	72,253	62,143	5,670,712	91.3	3.82	18,994	15,700	923,224	58.8
1974	3.02	77,935	65,405	4,701,402	71.9	4.95	17,588	13,809	622,711	45.1
1975	2.54	78,719	67,625	5,840,757	86.4	4.23	18,080	15,403	754,354	49.0
1976	2.15	84,588	71,506	6,289,169	88.0	3.62	18,143	14,466	710,797	49.1
1977	2.02	84,328	71,614	6,505,041	90.8	3.25	16,636	13,797	780,944	56.6
1978	2.25	81,675	71,930	7,267,927	101.0	3.59	16,197	13,410	731,270	54.5
1979	2.48	81,394	72,400	7,928,139	109.5	4.19	15,277	12,901	807,422	62.6
1980	3.12	84,043	72,961	6,639,396	91.0	5.19	15,639	12,513	579,343	46.3
1981	2.47	84,097	74,524	8,118,650	108.9	4.01	15,930	13,677	875,835	64.0
1982	2.55	81,857	72,719	8,235,101	113.2	4.41	16,028	14,137	835,083	59.1
1983	3.21	60,207	51,479	4,174,251	81.1	4.89	11,880	10,001	487,521	48.7
1984	2.63	80,517	71,897	7,672,130	106.7	4.15	17,254	15,355	866,241	56.4
1985	2.23	83,398	75,209	8,875,453	118.0	3.45	18,285	16,782	1,120,271	66.8
1986 2/	1.50	76,580	68,907	8,225,764	119.4	2.45	15,339	13,862	938,869	67.7
1987	1.94	66,200	59,505	7,131,300	119.8	3.04	11,756	10,531	730,809	69.4
1988	2.54	67,717	58,250	4,928,681	84.6	4.05	10,343	9,042	576,686	63.8
1989	2.36	72,322	64,783	7,531,953	116.3	3.75	12,642	11,103	615,420	55.4
1990	2.28	74,166	66,952	7,934,028	118.5	3.79	10,535	9,089	573,303	63.1
1991	2.37	75,957	68,822	7,474,765	108.6	4.02	11,064	9,870	584,860	59.3
1992	2.07	79,311	72,077	9,476,698	131.5	3.38	13,177	12,050	875,022	72.6
1993	2.50	73,235	62,921	6,336,470	100.7	4.13	9,882	8,916	534,172	59.9
1994 3/	2.26	79,158	72,917	10,103,030	138.6	3.80	9,772	8,967	655,021	73.0
1995 4/	2.95-3.35	71,408	64,832	7,373,700	113.7	5.09-5.80	9,192	8,216	463,634	56.4

See footnotes at end of table.

Continued--

Appendix table 1--Corn, sorghum, oats, barley: Farm price, planted acreage, harvested acreage, production, and yield, 1951 to date 1/--Continued

Year beginning June 1	Oats					Barley				
	Farm price	Planted acreage	Harvested for grain	Production	Yield per harvested acre	Farm price	Planted acreage	Harvested for grain	Production	Yield per harvested acre
	$/bu.	---1,000 acres---		1,000 bushels	Bushels	$/bu.	---1,000 acres---		1,000 bushels	Bushels
1951	0.82	41,015	35,233	1,277,647	36.3	1.26	10,790	9,424	257,213	27.3
1952	0.79	42,341	37,012	1,217,433	32.9	1.37	9,190	8,236	228,168	27.7
1953	0.74	43,220	37,536	1,153,205	30.7	1.17	9,615	8,680	246,723	28.4
1954	0.71	46,898	40,551	1,409,601	34.8	1.09	14,740	13,370	379,254	28.4
1955	0.60	47,494	39,027	1,495,978	38.3	0.92	16,293	14,523	403,065	27.8
1956	0.69	44,205	33,333	1,151,398	34.5	0.99	14,732	12,852	376,661	29.3
1957	0.61	41,840	34,065	1,289,880	37.9	0.89	16,398	14,872	442,761	29.8
1958	0.58	37,699	31,247	1,401,410	44.8	0.90	16,150	14,791	477,368	32.3
1959	0.65	35,064	27,758	1,050,051	37.8	0.86	16,766	14,869	420,203	28.3
1960	0.60	31,419	26,588	1,153,332	43.4	0.84	15,527	13,856	429,005	31.0
1961	0.64	32,314	23,886	1,010,314	42.3	0.98	15,623	12,806	392,441	30.6
1962	0.62	29,500	22,377	1,012,197	45.2	0.92	14,380	12,214	427,726	35.0
1963	0.62	28,054	21,308	965,510	45.3	0.90	13,452	11,236	392,833	35.0
1964	0.63	25,634	19,759	852,257	43.1	0.95	11,652	10,277	386,059	37.6
1965	0.62	24,046	18,522	929,554	50.2	1.02	10,123	9,166	393,055	42.9
1966	0.67	23,343	17,877	803,324	44.9	1.06	11,184	10,250	392,108	38.3
1967	0.66	20,719	16,110	793,800	49.3	1.01	10,077	9,230	373,745	40.5
1968	0.60	23,342	17,708	950,689	53.7	0.92	10,486	9,732	426,151	43.8
1969	0.58	23,561	17,971	965,863	53.7	0.89	10,291	9,557	427,055	44.7
1970	0.62	24,410	18,594	915,236	49.2	0.97	10,476	9,712	416,091	42.8
1971	0.60	21,831	15,705	878,079	55.9	0.99	11,061	10,104	462,423	45.8
1972	0.72	19,990	13,410	690,616	51.5	1.21	10,567	9,645	421,719	43.7
1973	1.18	18,605	13,770	659,136	47.9	2.14	11,045	10,295	417,434	40.5
1974	1.53	17,013	12,608	600,655	47.6	2.81	8,713	7,930	298,669	37.7
1975	1.46	16,434	13,038	638,960	49.0	2.42	9,373	8,617	379,162	44.0
1976	1.56	16,620	11,834	540,441	45.7	2.25	9,301	8,439	383,007	45.4
1977	1.09	17,732	13,485	752,774	55.8	1.78	10,778	9,728	427,784	44.0
1978	1.20	16,407	11,126	581,657	52.3	1.92	9,989	9,248	454,759	49.2
1979	1.33	13,960	9,682	526,748	54.4	2.27	8,116	7,527	383,201	50.9
1980	1.72	13,381	8,657	458,792	53.0	2.79	8,320	7,260	361,135	49.7
1981	1.88	13,632	9,407	509,529	54.2	2.48	9,618	9,038	473,512	52.4
1982	1.49	13,951	10,258	592,630	57.8	2.18	9,549	9,013	515,935	57.2
1983	1.62	20,289	9,062	476,471	52.6	2.47	10,411	9,731	508,269	52.3
1984	1.67	12,414	8,163	473,661	58.0	2.29	11,934	11,218	598,034	53.3
1985	1.23	13,235	8,147	518,490	63.6	1.98	13,139	11,591	590,213	50.9
1986	1.21	14,671	6,840	384,996	56.3	1.61	13,024	11,974	608,532	50.8
1987	1.56	17,907	6,888	373,713	54.3	1.81	10,929	9,957	521,499	52.4
1988	2.61	13,910	5,533	217,375	39.3	2.80	9,831	7,636	289,994	38.0
1989	1.49	12,085	6,882	373,587	54.3	2.42	9,125	8,313	404,203	48.6
1990	1.14	10,423	5,947	357,654	60.1	2.14	8,221	7,529	422,196	56.1
1991	1.21	8,653	4,816	243,851	50.6	2.10	8,941	8,413	464,326	55.2
1992	1.32	7,943	4,496	294,229	65.4	2.04	7,762	7,285	455,090	62.5
1993	1.36	7,937	3,803	206,770	54.4	1.99	7,786	6,753	398,041	58.9
1994 3/	1.22	6,639	4,010	229,008	57.1	2.03	7,159	6,667	374,862	56.2
1995 4/	1.55-1.65	6,336	2,959	163,197	55.2	2.60-2.90	6,689	6,277	361,352	57.6

1/ U.S. average prices based on U.S. monthly prices weighted by monthly marketings. Prices do not include an allowance for loans outstanding and government purchases. 2/ Crop year began October 1 prior to 1986. 3/ Preliminary. 4/ Projected as of November 1995.

Source: Agricultural Statistics Board, National Agricultural Statistics Service, USDA.

Appendix table 2--Foreign coarse grains: Supply and disappearance, 1975/76-1995/96 1/

Year	Beginning stocks	Production	Feed	Total Disappearance	Imports	Adjusted imports 2/	Ending stocks
			Million metric tons				
Corn:							
1975/76	32.3	190.9	123.2	228.5	57.4	NA	36.9
1976/77	36.9	196.4	121.3	235.5	57.2	NA	39.5
1977/78	39.5	200.2	132.2	247.0	62.9	NA	40.8
1978/79	40.8	207.5	138.3	260.0	69.8	NA	42.0
1979/80	42.0	223.9	160.4	280.2	79.3	73.9	46.7
1980/81	46.7	239.9	169.8	297.7	79.1	78.1	50.1
1981/82	50.1	235.2	177.9	291.4	77.9	67.3	44.6
1982/83	44.6	230.6	175.7	281.5	72.9	63.3	39.9
1983/84	39.9	241.8	169.5	288.9	64.2	61.1	40.7
1984/85	40.7	263.4	185.6	302.6	72.5	66.5	48.5
1985/86	48.5	253.1	186.4	290.2	61.6	54.2	42.3
1986/87	42.3	266.3	194.1	307.7	59.5	56.6	38.8
1987/88	38.8	269.3	200.8	313.1	63.6	56.6	38.6
1988/89	38.6	275.4	213.8	325.2	74.0	65.5	40.1
1989/90	40.1	269.3	218.0	330.4	80.9	74.4	39.1
1990/91	39.1	276.4	197.4	317.0	61.3	58.5	42.2
1991/92	42.2	297.4	213.2	325.7	73.8	63.1	53.7
1992/93	53.7	293.9	212.2	336.0	64.3	62.1	53.8
1993/94	53.8	310.0	221.1	346.5	63.3	56.0	50.5
1994/95 3/	50.5	298.8	235.1	352.2	76.0	69.9	52.1
1995/96 4/	52.1	314.0	252.4	373.3	68.5	63.3	44.6
Sorghum:							
1975/76	7.3	44.7	18.5	50.7	10.1	NA	7.2
1976/77	7.2	44.1	22.1	50.6	12.4	NA	7.2
1977/78	7.2	44.6	21.0	50.0	10.9	NA	7.4
1978/79	7.4	45.0	22.0	49.9	10.9	NA	7.4
1979/80	7.4	41.0	21.5	49.8	12.4	11.6	7.0
1980/81	7.0	44.6	23.1	50.8	12.8	14.1	8.2
1981/82	8.2	48.2	28.3	55.5	14.3	13.7	7.5
1982/83	7.5	43.9	25.0	50.5	12.3	11.6	6.2
1983/84	6.2	46.1	25.5	52.0	13.0	13.0	6.6
1984/85	6.6	43.8	25.8	51.8	12.8	13.1	6.1
1985/86	6.1	41.7	24.5	47.2	9.6	8.8	5.0
1986/87	5.0	40.4	22.9	46.2	7.9	7.8	4.3
1987/88	4.3	37.8	22.3	45.0	8.6	8.3	3.0
1988/89	3.0	39.8	23.1	45.9	11.0	10.8	4.8
1989/90	4.8	39.6	21.7	47.4	9.2	9.0	4.7
1990/91	4.7	38.2	21.1	44.8	8.0	7.8	4.0
1991/92	4.0	38.3	24.0	45.1	9.8	9.4	4.6
1992/93	4.6	42.8	23.0	49.4	8.7	8.6	5.1
1993/94	5.1	39.2	21.8	46.5	7.1	6.9	2.9
1994/95 3/	2.9	37.5	20.2	43.3	5.9	6.1	2.7
1995/96 4/	2.7	39.0	20.6	44.0	5.2	5.0	2.0

See footnotes at end of table.

Continued--

Appendix table 2--Foreign coarse grains: Supply and disappearance, 1978/79-1995/96 1/--Continued

Year	Beginning stocks	Production	Feed	Total Disappearance	Imports	Adjusted imports 2/	Ending stocks
			Million metric tons				
Barley:							
1975/76	19.3	127.7	92.7	130.3	13.5	NA	16.9
1976/77	16.9	157.8	114.3	155.8	13.5	NA	20.2
1977/78	20.2	147.8	109.5	151.5	14.4	NA	17.5
1978/79	17.5	165.7	118.6	162.9	13.5	NA	20.7
1979/80	20.7	145.7	113.8	151.7	16.6	11.1	15.7
1980/81	15.7	149.3	107.6	150.7	16.2	13.8	16.2
1981/82	16.2	139.2	105.4	143.8	20.3	13.9	13.6
1982/83	13.6	150.0	108.4	147.1	17.2	13.1	17.2
1983/84	17.2	147.2	115.9	154.2	20.2	16.4	12.0
1984/85	12.0	157.4	115.9	152.4	22.9	17.9	18.4
1985/86	18.4	159.9	120.5	156.3	22.1	18.2	22.3
1986/87	22.3	163.5	125.8	162.6	24.2	18.4	26.0
1987/88	26.0	162.5	126.4	165.1	23.9	15.7	25.9
1988/89	25.9	156.5	118.6	157.7	22.9	16.9	26.2
1989/90	26.2	156.1	122.0	161.3	22.6	15.5	22.4
1990/91	22.4	168.9	125.4	166.5	24.2	19.4	26.2
1991/92	26.2	159.0	118.7	157.1	23.8	18.5	29.7
1992/93	29.7	155.8	118.3	158.2	21.4	16.5	28.5
1993/94	28.5	161.2	120.8	161.0	19.8	16.5	28.7
1994/95 3/	28.7	153.0	117.8	158.4	17.5	13.3	23.2
1995/96 4/	23.2	139.9	108.9	148.2	18.1	12.8	17.8
Total coarse grains: 5/							
1975/76	69.2	455.6	279.1	502.6	83.2	75.2	70.7
1976/77	70.7	497.7	308.3	540.0	85.6	83.9	77.9
1977/78	77.9	485.3	308.4	543.1	90.3	89.0	75.0
1978/79	75.0	522.1	331.5	575.3	96.7	92.8	80.8
1979/80	80.8	497.1	338.1	571.0	110.7	99.2	77.3
1980/81	77.3	524.8	343.5	591.1	110.2	108.1	82.1
1981/82	82.1	512.2	353.7	580.4	114.7	97.5	73.1
1982/83	73.1	524.5	359.1	576.2	103.7	89.7	73.6
1983/84	73.6	540.4	366.6	598.3	99.0	92.9	71.2
1984/85	71.2	568.2	379.3	608.1	110.8	99.6	86.7
1985/86	86.7	557.5	387.7	597.2	95.1	82.2	82.3
1986/87	82.3	570.3	395.4	615.1	93.1	82.8	82.6
1987/88	82.6	567.3	403.9	623.1	98.6	82.6	77.9
1988/89	77.9	571.4	404.4	628.5	110.2	94.5	80.5
1989/90	80.5	569.7	413.1	641.8	115.3	100.4	76.7
1990/91	76.7	590.8	396.7	630.6	95.6	87.7	86.7
1991/92	86.7	586.3	400.6	619.8	110.1	93.9	100.6
1992/93	100.6	587.9	400.1	638.2	97.5	90.0	99.8
1993/94	99.8	603.6	408.0	645.1	91.7	81.0	94.7
1994/95 3/	94.7	577.8	412.7	642.8	102.0	91.6	88.6
1995/96 4/	88.6	576.2	421.7	650.1	94.8	83.8	68.9

NA = Not available.
1/ Aggregated on basis of local marketing years, except for adjusted imports. 2/ Based on Oct./Sept. trade year and excludes intra-EC trade. 3/ Preliminary. 4/ Forecast. 5/ Includes oats, rye, millet, and mixed grains.

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

Appendix table 3--Feed grains: Marketing year supply and disappearance, 1975/76-1995/96 1/

Year 2/	Supply				Disappearance						Ending Stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 3/	Total
	Million metric tons												
1975/76	21.1	185.1	0.3	206.5	16.4	1.5	115.8	133.7	48.8	182.5	0.4	23.6	23.9
1976/77	23.9	194.0	0.3	218.2	17.1	1.6	112.8	131.5	49.8	181.2	0.0	37.0	37.0
1977/78	37.0	205.3	0.2	242.5	18.1	1.5	117.4	137.0	55.2	192.2	0.2	50.1	50.3
1978/79	50.3	221.5	0.2	272.0	19.1	1.3	134.6	155.1	59.2	214.3	3.8	54.0	57.7
1979/80	57.7	237.9	0.2	295.8	20.0	1.3	140.1	161.4	70.6	232.0	7.9	55.9	63.8
1980/81	63.8	197.9	0.2	261.9	20.6	1.4	125.7	147.7	70.0	217.6	7.3	36.9	44.2
1981/82	44.2	246.2	0.2	290.6	22.4	1.4	129.4	153.2	59.5	212.6	8.3	69.7	78.0
1982/83	78.0	250.2	0.3	328.4	25.6	1.4	140.3	167.3	52.6	219.9	33.5	75.0	108.6
1983/84	108.6	136.4	0.7	245.6	27.3	1.4	121.2	149.9	56.1	206.0	8.0	31.6	39.6
1984/85	39.6	236.8	0.8	277.2	30.9	1.5	131.2	163.6	56.1	219.7	8.9	48.6	57.5
1985/86	57.5	274.3	0.9	332.6	33.5	1.5	135.1	170.1	36.1	206.2	20.4	106.0	126.4
1986/87	126.4	251.6	0.7	378.8	35.0	1.4	144.4	180.8	45.9	226.6	48.7	103.4	152.1
1987/88	152.1	216.5	1.1	369.7	35.9	1.3	146.8	184.0	52.1	236.1	34.1	99.5	133.6
1988/89	133.6	149.3	1.4	284.3	37.5	1.2	118.7	157.3	61.1	218.4	18.6	47.3	65.9
1989/90	65.9	221.2	1.5	288.6	39.2	1.1	133.0	173.3	69.7	243.0	10.5	35.0	45.5
1990/91	45.5	230.5	1.5	277.5	39.5	1.1	137.6	178.3	51.5	229.8	11.3	36.4	47.7
1991/92	47.7	218.4	2.3	268.4	41.7	1.1	141.9	184.7	49.7	234.4	3.2	30.7	34.0
1992/93	34.0	277.1	1.4	312.5	43.1	1.1	154.2	198.3	51.1	249.4	1.6	61.4	63.1
1993/94	63.1	186.2	3.9	253.2	45.1	1.0	139.3	185.5	40.3	225.8	1.3	26.1	27.4
1994/95 4/	27.4	284.8	3.3	315.4	47.9	0.9	158.9	207.7	62.4	270.1	1.2	44.1	45.3
1995/96 5/	45.3	209.3	3.3	257.9	48.0	1.0	131.4	180.4	57.5	237.9	1.2	18.8	20.0

1/ Aggregated data on corn, sorghum, barley, and oats. 2/ The marketing year for corn and sorghum begins September 1; for oats and barley, June 1. 3/ Includes total government loans (original and reseal). 4/ Preliminary. 5/ Projected as of November 1995.

Appendix table 4--Corn: Marketing year supply and disappearance, 1975/76 to date

Year beginning Sept. 1	Supply				Disappearance						Ending Stocks				
	Beginning stocks	Production	Imports	Total	Domestic use: Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total	Stocks to use ratio	Average farm price
	Million bushels														$/bu.
1975/76	558	5,841	2	6,400	501	20	3,582	4,103	1,664	5,767	0	633	633	11.0	2.54
1976/77	633	6,289	2	6,925	522	20	3,602	4,144	1,645	5,789	0	1,135	1,136	19.6	2.15
1977/78	1,136	6,505	2	7,643	562	20	3,730	4,311	1,896	6,207	4	1,432	1,436	23.1	2.02
1978/79	1,436	7,268	1	8,705	589	20	4,274	4,882	2,113	6,995	101	1,609	1,710	24.4	2.25
1979/80	1,710	7,928	1	9,638	620	20	4,563	5,203	2,402	7,604	260	1,774	2,034	26.8	2.48
1980/81	2,034	6,639	1	8,675	639	20	4,232	4,891	2,391	7,282	242	1,150	1,392	19.1	3.12
1981/82	1,392	8,119	1	9,511	714	19	4,245	4,978	1,997	6,975	280	2,257	2,537	36.4	2.47
1982/83	2,537	8,235	0	10,772	840	15	4,573	5,428	1,821	7,249	1,143	2,380	3,523	48.6	2.55
1983/84	3,523	4,174	2	7,699	911	19	3,876	4,806	1,886	6,693	202	805	1,006	15.0	3.21
1984/85	1,006	7,672	2	8,680	1,046	21	4,115	5,182	1,850	7,032	225	1,423	1,648	23.4	2.63
1985/86	1,648	8,875	10	10,534	1,133	20	4,114	5,267	1,227	6,494	546	3,494	4,040	62.2	2.23
1986/87	4,040	8,226	2	12,267	1,207	17	4,669	5,893	1,492	7,385	1,443	3,439	4,882	66.1	1.50
1987/88	4,882	7,131	3	12,016	1,226	17	4,798	6,041	1,716	7,757	835	3,424	4,259	54.9	1.94
1988/89	4,259	4,929	3	9,191	1,275	18	3,941	5,234	2,026	7,260	363	1,568	1,930	26.6	2.54
1989/90	1,930	7,532	2	9,464	1,337	19	4,396	5,752	2,368	8,120	233	1,111	1,344	16.6	2.36
1990/91	1,344	7,934	3	9,282	1,354	19	4,663	6,036	1,725	7,761	371	1,150	1,521	19.6	2.28
1991/92	1,521	7,475	20	9,016	1,434	20	4,877	6,331	1,584	7,915	113	988	1,100	13.9	2.37
1992/93	1,100	9,477	7	10,584	1,493	19	5,296	6,808	1,663	8,471	56	2,057	2,113	24.9	2.07
1993/94	2,113	6,336	21	8,470	1,568	20	4,704	6,292	1,328	7,620	45	805	850	11.2	2.50
1994/95 2/	850	10,103	10	10,963	1,675	18	5,534	7,227	2,177	9,404	42	1,516	1,558	16.6	2.26
1995/96 3/	1,558	7,374	10	8,942	1,680	20	4,575	6,275	2,050	8,325	42	575	617	7.4	2.95-3.35

1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected.

Appendix table 5--Sorghum: Marketing year supply and disappearance, 1975/76 to date

Year beginning Sept. 1	Supply				Disappearance						Ending Stocks				
	Beginning stocks	Production	Imports	Total	Domestic use: Food, alcohol, and industrial	Domestic use: Seed	Domestic use: Feed and residual	Domestic use: Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total	Stocks to use ratio	Average farm price
	Million bushels														$/bu.
1975/76	65	754	0	820	9	2	494	505	232	737	0	82	82	11.2	2.37
1976/77	82	711	0	793	9	2	411	422	254	676	0	117	117	17.4	2.03
1977/78	117	781	0	898	9	2	448	459	223	682	5	211	216	31.7	1.82
1978/79	216	731	0	948	10	2	538	550	190	740	44	164	208	28.1	2.01
1979/80	208	807	0	1,015	10	2	495	508	330	837	46	132	178	21.2	2.35
1980/81	178	579	0	757	9	2	323	334	293	627	42	89	130	20.8	2.91
1981/82	130	876	0	1,006	9	2	417	428	260	688	42	277	319	46.3	2.25
1982/83	319	835	0	1,154	8	2	495	505	210	715	172	268	439	61.5	2.47
1983/84	439	488	0	927	8	2	385	395	244	639	103	185	288	45.0	2.74
1984/85	288	866	0	1,154	15	2	539	557	297	854	112	188	300	35.2	2.32
1985/86	300	1,120	0	1,421	26	2	664	692	178	870	207	344	551	63.4	1.93
1986/87	551	939	0	1,490	10	2	536	548	198	747	409	334	743	99.6	1.37
1987/88	743	731	0	1,474	24	1	555	580	232	811	464	199	663	81.7	1.70
1988/89	663	577	0	1,239	21	2	466	488	311	800	341	99	440	55.0	2.27
1989/90	440	615	0	1,055	14	1	517	532	303	835	163	57	220	26.3	2.10
1990/91	220	573	0	793	7	1	410	418	232	651	65	78	143	21.9	2.12
1991/92	143	585	0	727	7	2	374	383	292	674	8	45	53	7.9	2.25
1992/93	53	875	0	928	6	1	469	476	277	753	4	171	175	23.2	1.89
1993/94	175	534	0	709	6	1	453	460	202	662	1	47	48	7.2	2.31
1994/95 2/	48	655	0	703	6	1	402	409	223	631	1	70	71	11.3	2.13
1995/96 3/	71	464	0	535	6	1	315	322	170	492	1	42	43	8.7	2.85-3.25

1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected.

Appendix table 6--Barley: Marketing year supply and disappearance, 1975/76 to date

Year beginning June 1	Supply				Disappearance						Ending Stocks				
	Beginning stocks	Production	Imports	Total	Domestic use: Food, alcohol, and industrial	Domestic use: Seed	Domestic use: Feed and residual	Domestic use: Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total	Stocks to use ratio	Average farm price
	Million bushels														$/bu.
1975/76	92	379	13	484	131	16	186	333	23	355	0	128	128	36.1	2.42
1976/77	128	383	9	520	137	18	174	329	65	394	0	126	126	32.1	2.25
1977/78	126	428	6	561	139	17	177	332	55	388	0	173	173	44.7	1.78
1978/79	173	455	7	635	154	14	215	382	25	407	3	226	228	56.1	1.92
1979/80	228	383	7	618	158	14	202	373	53	426	3	189	192	45.1	2.27
1980/81	192	361	6	559	162	16	168	346	76	422	3	134	137	32.6	2.79
1981/82	137	474	7	618	158	16	198	372	98	470	3	145	148	31.5	2.48
1982/83	148	516	8	672	157	17	237	411	44	455	6	211	217	47.6	2.18
1983/84	217	508	5	730	155	20	278	452	89	541	12	178	189	35.0	2.47
1984/85	189	598	7	795	153	21	301	476	72	547	16	232	247	45.2	2.29
1985/86	247	590	6	844	156	21	319	497	20	517	57	270	327	63.3	1.98
1986/87	327	609	7	942	157	18	298	472	134	606	76	261	336	55.5	1.61
1987/88	336	521	11	869	158	16	253	427	121	548	50	271	321	58.6	1.81
1988/89	321	290	11	622	160	15	171	346	79	425	30	166	196	46.2	2.80
1989/90	196	404	13	614	162	14	193	369	84	453	19	142	161	35.5	2.42
1990/91	161	422	13	596	161	15	205	380	81	461	8	127	135	29.4	2.14
1991/92	135	464	25	624	163	13	225	401	94	496	7	122	129	25.9	2.10
1992/93	129	455	11	595	158	13	192	364	80	444	5	146	151	34.1	2.04
1993/94	151	398	71	621	163	12	241	416	66	482	5	134	139	28.8	1.99
1994/95 2/	139	375	66	580	164	11	226	401	66	467	5	108	113	24.1	2.03
1995/96 3/	113	361	55	529	163	12	215	390	50	440	5	84	89	20.2	2.60-2.90

1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected.

Appendix table 7--Oats: Marketing year supply and disappearance, 1975/76 to date

Year beginning June 1	Supply				Disappearance						Ending Stocks				
					Domestic use										
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total	Stocks to use ratio	Average farm price
	Million bushels														$/bu.
1975/76	224	639	1	863	44	40	562	646	12	659	25	180	205	31.1	1.46
1976/77	205	540	1	747	42	44	488	574	8	582	0	164	164	28.2	1.56
1977/78	164	753	2	919	42	39	515	596	10	606	0	313	313	51.7	1.09
1978/79	313	582	1	895	41	34	530	605	10	615	3	277	280	45.5	1.20
1979/80	280	527	1	807	41	32	495	568	3	571	3	234	236	41.4	1.33
1980/81	236	459	1	696	41	33	437	511	9	519	2	175	177	34.1	1.72
1981/82	177	510	1	688	41	34	458	533	3	536	1	151	152	28.3	1.88
1982/83	152	593	4	748	42	43	442	527	1	528	1	219	220	41.6	1.49
1983/84	220	476	30	726	41	30	474	544	1	545	2	179	181	33.2	1.62
1984/85	181	474	34	688	41	31	436	508	0	508	1	178	180	35.4	1.67
1985/86	180	518	27	726	44	33	464	541	1	542	2	182	184	33.9	1.23
1986/87	184	385	32	601	45	38	385	468	1	468	4	129	133	28.3	1.21
1987/88	133	374	46	552	50	32	358	440	1	440	4	109	112	25.5	1.56
1988/89	112	217	63	392	73	27	194	294	1	294	2	96	98	33.4	2.61
1989/90	98	374	66	538	92	23	266	381	1	381	1	156	157	41.1	1.49
1990/91	157	358	63	578	101	19	286	406	1	407	0	171	171	42.1	1.14
1991/92	171	244	75	490	107	18	235	360	2	362	0	128	128	35.3	1.21
1992/93	128	294	55	477	107	18	233	358	6	364	0	113	113	31.1	1.32
1993/94	113	207	107	427	110	15	193	318	3	321	0	106	106	32.8	1.36
1994/95 2/	106	229	93	428	111	14	201	326	1	327	0	101	101	30.8	1.22
1995/96 3/	101	163	105	369	110	15	155	280	1	281	0	88	88	31.2	1.55-1.65

1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected.

Appendix table 8--Corn: Marketing year supply and disappearance, by quarter, 1975/76 to date

Year beginning September 1	Supply: Beginning stocks	Supply: Production	Supply: Imports	Supply: Total	Disappearance: Domestic use: Food, alcohol, and industrial	Disappearance: Domestic use: Seed	Disappearance: Domestic use: Feed and residual	Disappearance: Domestic use: Total	Disappearance: Exports	Disappearance: Total disappearance	Ending stocks: Govt. owned	Ending stocks: Privately owned 1/	Ending stocks: Total
	Million bushels												
1975/76:													
Sept.-Nov.	558.0	5,840.8	0.2	6,399.0	123.8	0.0	927.7	1,051.5	372.9	1,424.4	0.3	4,974.3	4,974.6
Dec.-Feb.	4,974.6	---	0.6	4,975.2	114.4	0.0	1,060.4	1,174.8	426.8	1,601.6	0.2	3,373.4	3,373.6
Mar.-May	3,373.6	---	0.2	3,373.8	130.0	16.1	912.5	1,058.6	446.4	1,505.0	0.4	1,868.4	1,868.8
June-Aug.	1,868.8	---	0.5	1,869.3	132.5	4.0	681.3	817.8	418.3	1,236.1	0.2	633.0	633.2
Mkt. year	558.0	5,840.8	1.5	6,400.3	500.7	20.1	3,581.9	4,102.7	1,664.4	5,767.1	0.2	633.0	633.2
1976/77:													
Sept.-Nov.	633.2	6,289.2	0.5	6,922.9	130.3	0.0	936.6	1,066.9	468.8	1,535.7	0.2	5,387.0	5,387.2
Dec.-Feb.	5,387.2	---	0.4	5,387.6	117.9	0.0	1,038.9	1,156.8	382.6	1,539.4	0.1	3,848.1	3,848.2
Mar.-May	3,848.2	---	0.5	3,848.7	131.9	16.1	899.8	1,047.8	430.9	1,478.7	0.3	2,369.7	2,370.0
June-Aug.	2,370.0	---	1.0	2,371.0	142.0	4.0	726.6	872.6	362.8	1,235.4	0.2	1,135.4	1,135.6
Mkt. year	633.2	6,289.2	2.4	6,924.8	522.1	20.1	3,601.9	4,144.1	1,645.1	5,789.2	0.2	1,135.4	1,135.6
1977/78:													
Sept.-Nov.	1,135.6	6,505.0	0.6	7,641.3	138.9	0.0	1,016.6	1,155.5	399.1	1,554.6	0.2	6,086.5	6,086.7
Dec.-Feb.	6,086.7	---	0.7	6,087.4	128.6	0.0	1,069.3	1,197.9	407.9	1,605.8	0.4	4,481.2	4,481.6
Mar.-May	4,481.6	---	0.5	4,482.1	141.7	15.6	939.4	1,096.7	524.3	1,621.0	0.4	2,860.7	2,861.1
June-Aug.	2,861.1	---	0.6	2,861.7	152.3	3.9	704.4	860.6	565.1	1,425.8	3.5	1,432.4	1,435.9
Mkt. year	1,135.6	6,505.0	2.4	7,643.0	561.5	19.5	3,729.7	4,310.7	1,896.4	6,207.1	3.5	1,432.4	1,435.9
1978/79:													
Sept.-Nov.	1,435.9	7,267.9	0.1	8,704.0	146.7	0.0	1,160.2	1,306.9	468.8	1,775.8	60.3	6,867.9	6,928.2
Dec.-Feb.	6,928.2	---	0.3	6,928.5	135.1	0.0	1,229.0	1,364.1	413.3	1,777.4	95.2	5,055.9	5,151.1
Mar.-May	5,151.1	---	0.3	5,151.4	157.5	15.6	1,136.4	1,309.5	554.6	1,864.2	100.6	3,186.6	3,287.2
June-Aug.	3,287.2	---	0.4	3,287.6	149.2	3.9	748.7	901.8	676.3	1,578.1	100.5	1,609.0	1,709.5
Mkt. year	1,435.9	7,267.9	1.2	8,705.0	588.5	19.5	4,274.4	4,882.4	2,113.1	6,995.5	100.5	1,609.0	1,709.5
1979/80:													
Sept.-Nov.	1,709.5	7,928.1	0.2	9,637.9	151.5	0.0	1,271.0	1,422.5	621.3	2,043.8	99.6	7,494.5	7,594.1
Dec.-Feb.	7,594.1	---	0.2	7,594.3	140.3	0.0	1,299.2	1,439.5	597.7	2,037.3	100.1	5,456.9	5,557.0
Mar.-May	5,557.0	---	0.2	5,557.2	159.6	16.0	1,149.5	1,325.1	587.8	1,912.9	213.5	3,430.8	3,644.3
June-Aug.	3,644.3	---	0.1	3,644.4	168.1	4.0	843.3	1,015.4	594.7	1,610.1	260.1	1,774.2	2,034.3
Mkt. year	1,709.5	7,928.1	0.7	9,638.4	619.5	20.0	4,563.0	5,202.5	2,401.5	7,604.1	260.1	1,774.2	2,034.3
1980/81:													
Sept.-Nov.	2,034.3	6,639.4	0.3	8,674.0	154.5	0.0	1,235.7	1,390.2	687.9	2,078.1	256.7	6,339.2	6,595.9
Dec.-Feb.	6,595.9	---	0.0	6,595.9	144.7	0.0	1,142.8	1,287.5	646.0	1,933.5	252.3	4,410.1	4,662.4
Mar.-May	4,662.4	---	0.0	4,662.4	166.4	16.2	1,092.4	1,275.0	614.0	1,888.9	251.6	2,521.9	2,773.5
June-Aug.	2,773.5	---	0.5	2,774.0	173.4	4.0	761.2	938.6	443.3	1,381.9	241.8	1,150.3	1,392.1
Mkt. year	2,034.3	6,639.4	0.8	8,674.5	639.0	20.2	4,232.1	4,891.3	2,391.1	7,282.4	241.8	1,150.3	1,392.1
1981/82:													
Sept.-Nov.	1,392.1	8,118.7	0.1	9,510.9	173.3	0.0	1,217.4	1,390.7	519.1	1,909.8	243.6	7,357.5	7,601.1
Dec.-Feb.	7,601.1	---	0.2	7,601.3	165.4	0.0	1,199.2	1,364.6	470.2	1,834.9	259.3	5,507.1	5,766.4
Mar.-May	5,766.4	---	0.0	5,766.4	185.3	16.0	1,089.2	1,290.5	595.8	1,886.3	269.7	3,610.4	3,880.1
June-Aug.	3,880.1	---	0.2	3,880.3	189.9	3.4	738.8	932.1	411.6	1,343.7	280.1	2,256.5	2,536.6
Mkt. year	1,392.1	8,118.7	0.6	9,511.3	714.0	19.4	4,244.5	4,977.9	1,996.8	6,974.7	280.1	2,256.5	2,536.6

See footnotes at end of table.

Continued--

Appendix table 8--Corn: Marketing year supply and disappearance, by quarter, 1975/76 to date --Continued

Year beginning September 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1982/83:													
Sept.-Nov.	2,536.6	8,235.1	0.2	10,771.9	207.5	0.0	1,215.0	1,422.5	443.1	1,865.6	372.0	8,534.3	8,906.3
Dec.-Feb.	8,906.3	---	0.1	8,906.4	192.4	0.0	1,305.2	1,497.6	509.6	2,007.2	470.8	6,428.4	6,899.2
Mar.-May	6,899.2	---	0.1	6,899.3	216.2	11.6	1,272.2	1,500.1	475.3	1,975.4	491.7	4,432.2	4,923.9
June-Aug.	4,923.9	---	0.1	4,924.0	223.9	2.9	780.8	1,007.6	393.3	1,400.9	1,142.7	2,380.4	3,523.1
Mkt. year	2,536.6	8,235.1	0.5	10,772.2	840.0	14.5	4,573.2	5,427.7	1,821.3	7,249.1	1,142.7	2,380.4	3,523.1
1983/84:													
Sept.-Nov.	3,523.1	4,174.3	0.4	7,697.7	227.4	0.0	1,325.3	1,552.7	493.4	2,046.0	1,227.0	4,424.7	5,651.7
Dec.-Feb.	5,651.7	---	0.3	5,652.0	212.3	0.0	1,068.8	1,281.1	505.9	1,787.0	1,214.0	2,651.0	3,865.0
Mar.-May	3,865.0	---	0.5	3,865.5	235.7	16.8	954.5	1,207.0	513.4	1,720.4	195.0	1,950.1	2,145.1
June-Aug.	2,145.1	---	0.5	2,145.6	235.7	2.3	527.6	765.6	373.7	1,139.3	201.5	804.8	1,006.3
Mkt. year	3,523.1	4,174.3	1.7	7,699.1	911.0	19.1	3,876.3	4,806.4	1,886.4	6,692.8	201.5	804.8	1,006.3
1984/85:													
Sept.-Nov.	1,006.3	7,672.1	0.7	8,679.2	244.1	0.0	1,300.7	1,544.8	503.2	2,048.1	206.7	6,424.4	6,631.1
Dec.-Feb.	6,631.1	---	0.1	6,631.2	236.1	0.0	1,191.5	1,427.6	580.4	2,008.0	209.7	4,413.5	4,623.2
Mar.-May	4,623.2	---	0.8	4,624.0	277.4	17.0	1,019.4	1,313.8	474.7	1,788.5	221.7	2,613.8	2,835.5
June-Aug.	2,835.5	---	0.1	2,835.6	288.4	4.2	602.9	895.5	291.9	1,187.4	224.9	1,423.3	1,648.2
Mkt. year	1,006.3	7,672.1	1.7	8,680.2	1,046.0	21.2	4,114.5	5,181.7	1,850.3	7,032.0	224.9	1,423.3	1,648.2
1985/86:													
Sept.-Nov.	1,648.2	8,875.5	0.9	10,524.5	276.3	0.0	1,218.7	1,495.0	414.8	1,909.8	388.6	8,226.1	8,614.7
Dec.-Feb.	8,614.7	---	1.0	8,615.7	262.4	0.0	1,306.0	1,568.3	460.2	2,028.6	509.4	6,077.7	6,587.1
Mar.-May	6,587.1	---	2.2	6,589.3	291.2	16.1	1,090.6	1,397.9	201.4	1,599.3	550.9	4,439.1	4,990.0
June-Aug.	4,990.0	---	5.9	4,995.9	303.1	3.4	499.0	805.5	150.9	956.4	545.7	3,493.8	4,039.5
Mkt. year	1,648.2	8,875.5	9.9	10,533.6	1,133.0	19.5	4,114.2	5,266.7	1,227.3	6,494.1	545.7	3,493.8	4,039.5
1986/87:													
Sept.-Nov.	4,039.5	8,225.8	0.7	12,266.0	287.6	0.0	1,354.7	1,642.3	318.2	1,960.5	968.2	9,337.3	10,305.5
Dec.-Feb.	10,305.5	---	0.2	10,305.7	277.3	0.0	1,467.3	1,744.6	312.8	2,057.5	1,362.2	6,886.0	8,248.2
Mar.-May	8,248.2	---	0.4	8,248.6	318.4	16.4	1,085.6	1,420.4	496.1	1,916.4	1,491.5	4,840.7	6,332.2
June-Aug.	6,332.2	---	0.4	6,332.6	323.5	0.3	761.8	1,085.6	365.3	1,450.9	1,443.2	3,438.5	4,881.7
Mkt. year	4,039.5	8,225.8	1.8	12,267.0	1,206.8	16.7	4,669.4	5,892.9	1,492.5	7,385.3	1,443.2	3,438.5	4,881.7
1987/88:													
Sept.-Nov.	4,881.7	7,131.3	0.6	12,013.6	295.4	0.0	1,551.6	1,847.0	395.6	2,242.6	1,683.4	8,087.6	9,771.0
Dec.-Feb.	9,771.0	---	0.7	9,771.7	285.3	0.0	1,446.1	1,731.4	404.7	2,136.1	1,767.7	5,867.9	7,635.6
Mar.-May	7,635.6	---	1.4	7,637.0	318.6	16.7	952.8	1,288.1	509.7	1,797.8	1,304.9	4,534.3	5,839.2
June-Aug.	5,839.2	---	0.8	5,840.0	326.7	0.5	847.2	1,174.4	406.4	1,580.9	835.0	3,424.1	4,259.1
Mkt. year	4,881.7	7,131.3	3.4	12,016.4	1,226.0	17.2	4,797.7	6,040.9	1,716.4	7,757.3	835.0	3,424.1	4,259.1
1988/89:													
Sept.-Nov.	4,259.1	4,928.7	0.6	9,188.4	305.2	0.0	1340.9	1,646.1	470.8	2116.8	611.0	6460.6	7,071.6
Dec.-Feb.	7,071.6	---	0.6	7,072.2	294.9	0.0	1,071.5	1,366.4	501.8	1,868.2	465.0	4,738.9	5,203.9
Mar.-May	5,203.9	---	1.2	5,205.1	333.3	16.7	846.1	1,196.1	589.7	1,785.8	417.7	3,001.6	3,419.3
June-Aug.	3,419.3	---	0.4	3,419.7	341.6	1.7	682.5	1,025.8	463.4	1,489.2	362.5	1,567.9	1,930.4
Mkt. year	4,259.1	4,928.7	2.8	9,190.6	1,275.0	18.4	3,941.0	5,234.4	2,025.8	7,260.1	362.5	1,567.9	1,930.4

See footnotes at end of table.

Continued--

Appendix table 8--Corn: Marketing year supply and disappearance, by quarter, 1975/76 to date --Continued

Year beginning September 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1989/90:													
Sept.-Nov.	1,930.4	7,532.0	0.6	9,463.0	295.6	0.0	1,503.1	1,798.7	582.3	2,380.9	628.2	6,453.9	7,082.1
Dec.-Feb.	7,082.1	---	0.4	7,082.5	306.1	0.0	1,282.2	1,588.3	681.8	2,270.1	537.2	4,275.2	4,812.4
Mar.-May	4,812.4	---	0.6	4,813.0	366.1	16.7	986.5	1,369.2	600.6	1,969.8	299.3	2,543.9	2,843.2
June-Aug.	2,843.2	---	0.2	2,843.4	369.2	2.2	623.9	995.4	503.6	1,499.0	233.0	1,111.5	1,344.5
Mkt. year	1,930.4	7,532.0	1.9	9,464.3	1,337.0	18.9	4,395.7	5,751.6	2,368.2	8,119.8	233.0	1,111.5	1,344.5
1990/91:													
Sept.-Nov.	1,344.5	7,934.0	0.9	9,279.4	321.7	0.0	1,636.5	1,958.2	380.9	2,339.1	205.9	6,734.4	6,940.3
Dec.-Feb.	6,940.3	---	0.3	6,940.6	315.7	0.0	1,365.2	1,680.9	470.7	2,151.6	195.6	4,593.4	4,789.0
Mar.-May	4,789.0	---	0.8	4,789.8	351.5	17.6	975.1	1,344.2	453.6	1,797.8	435.9	2,556.1	2,992.0
June-Aug.	2,992.0	---	1.5	2,993.4	364.8	1.7	686.2	1,052.8	419.4	1,472.2	371.1	1,150.1	1,521.2
Mkt. year	1,344.5	7,934.0	3.4	9,281.9	1,353.7	19.3	4,663.0	6,036.1	1,724.6	7,760.7	371.1	1,150.1	1,521.2
1991/92:													
Sept.-Nov.	ERR	7,474.8	6.5	ERR	348.7	0.0	ERR	ERR	421.3	ERR	249.7	6,297.6	6,547.3
Dec.-Feb.	6,547.3	---	4.4	6,551.7	344.4	0.0	1,284.6	1,629.0	361.7	1,990.7	199.2	4,361.8	4,561.0
Mar.-May	4,561.0	---	5.4	4,566.4	368.5	19.9	1,068.0	1,456.4	371.5	1,827.8	147.2	2,591.4	2,738.6
June-Aug.	2,738.6	---	3.3	2,741.9	372.2	0.3	839.4	1,211.9	429.7	1,641.6	112.5	987.8	1,100.3
Mkt. year	ERR	7,474.8	19.6	ERR	1,433.8	20.2	ERR	ERR	1,584.1	ERR	112.5	987.8	1,100.3
1992/93:													
Sept.-Nov.	1,100.3	9,476.7	1.3	10,578.3	359.8	0.0	1,824.6	2,184.4	487.5	2671.9	87.4	7,819.0	7,906.4
Dec.-Feb.	7,906.4	---	1.0	7,907.4	350.1	0.0	1,416.0	1,766.1	463.0	2229.2	86.8	5,591.4	5,678.2
Mar.-May	5,678.2	---	2.0	5,680.2	386.5	16.4	1,156.6	1,559.5	411.3	1970.8	64.4	3,645.0	3,709.4
June-Aug.	3,709.4	---	2.8	3,712.2	396.3	2.3	899.2	1,297.8	301.4	1599.3	55.5	2,057.5	2,113.0
Mkt. year	1,100.3	9,476.7	7.1	10,584.1	1,492.7	18.7	5,296.4	6,807.8	1,663.3	8,471.1	55.5	2,057.5	2,113.0
1993/94:													
Sept.-Nov.	2,113.0	6,336.5	5.2	8,454.7	378.1	0.0	1,704.6	2,082.7	435.4	2,518.1	52.6	5,883.9	5,936.5
Dec.-Feb.	5,936.5	---	8.0	5,944.5	371.1	0.0	1,247.7	1,618.8	330.0	1,948.8	49.8	3,945.9	3,995.7
Mar.-May	3,995.7	---	6.3	4,002.0	399.2	19.5	953.6	1,372.3	269.8	1,642.1	47.8	2,312.1	2,359.9
June-Aug.	2,359.9	---	1.4	2,361.3	419.7	0.6	797.7	1,218.0	293.1	1,511.1	45.0	805.1	850.1
Mkt. year	2,113.0	6,336.5	20.8	8,470.3	1,568.1	20.1	4,703.6	6,291.8	1,328.3	7,620.1	45.0	805.1	850.1
1994/95:													
Sept.-Nov.	850.1	10,103.0	2.1	10,955.2	410.3	0.0	2,015.1	2,425.4	449.3	2,874.8	55.0	8,025.5	8,080.5
Dec.-Feb.	8,080.5	---	3.7	8,084.2	402.8	0.0	1,499.3	1,902.1	590.4	2,492.5	50.0	5,541.7	5,591.7
Mar.-May	5,591.7	---	3.0	5,594.7	431.8	16.0	1,163.8	1,611.6	568.2	2,179.8	50.0	3,364.9	3,414.9
June-Aug.	3,414.9	---	0.8	3,415.7	429.7	2.4	855.7	1,287.8	569.6	1,857.3	42.0	1,516.3	1,558.3
Mkt. year 2/	850.1	10,103.0	9.6	10,962.7	1,674.6	18.4	5,533.9	7,226.9	2,177.5	9,404.4	42.0	1,516.3	1,558.3
1995/96:													
Mkt. year 3/	1,558.3	7,373.7	10.0	8,942.0	1,679.8	20.2	4,575.0	6,275.0	2,050.0	8,325.0	42.0	575.0	617.0

--- = Not applicable.
1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected.

Appendix table 9--Sorghum: Marketing year supply and disappearance, by quarter, 1975/76 to date

Year beginning September 1	Supply: Beginning stocks	Supply: Production	Supply: Imports	Supply: Total	Disappearance: Domestic use: Food, alcohol, and industrial	Disappearance: Domestic use: Seed	Disappearance: Domestic use: Feed and residual	Disappearance: Domestic use: Total	Disappearance: Exports	Disappearance: Total disappearance	Ending stocks: Govt. owned	Ending stocks: Privately owned 1/	Ending stocks: Total
	Million bushels												
1975/76:													
Sept.-Nov.	65.3	754.4	0.0	819.7	2.1	0.0	167.3	169.4	66.2	235.6	0.0	584.1	584.1
Dec.-Feb.	584.1	---	0.0	584.1	2.2	0.0	186.6	188.8	72.2	261.0	0.0	323.1	323.1
Mar.-May	323.1	---	0.0	323.1	2.6	1.6	123.5	127.7	41.4	169.1	0.0	154.0	154.0
June-Aug.	154.0	---	0.0	154.0	1.9	0.7	16.7	19.3	52.4	71.7	0.0	82.3	82.3
Mkt. year	65.3	754.4	0.0	819.7	8.8	2.3	494.1	505.2	232.2	737.4	0.0	82.3	82.3
1976/77:													
Sept.-Nov.	82.3	710.8	0.0	793.1	2.1	0.0	143.3	145.3	62.1	207.4	0.0	585.7	585.7
Dec.-Feb.	585.7	---	0.0	585.7	2.2	0.0	141.6	143.8	80.7	224.5	0.0	361.2	361.2
Mar.-May	361.2	---	0.0	361.2	2.6	1.4	100.1	104.0	61.5	165.5	0.3	195.4	195.7
June-Aug.	195.7	---	0.0	195.7	1.9	0.6	26.2	28.7	49.7	78.4	0.2	117.1	117.3
Mkt. year	82.3	710.8	0.0	793.1	8.7	2.0	411.2	421.9	253.9	675.8	0.2	117.1	117.3
1977/78:													
Sept.-Nov.	117.3	780.9	0.0	898.2	2.1	0.0	139.3	141.4	42.9	184.3	0.0	713.9	713.9
Dec.-Feb.	713.9	---	0.0	713.9	2.2	0.0	153.7	155.9	74.3	230.2	0.2	483.5	483.7
Mar.-May	483.7	---	0.0	483.7	2.8	1.4	100.7	104.9	59.7	164.6	0.3	318.8	319.1
June-Aug.	319.1	---	0.0	319.1	2.3	0.6	53.8	56.7	46.0	102.7	5.0	211.4	216.4
Mkt. year	117.3	780.9	0.0	898.3	9.4	2.0	447.7	459.1	222.8	681.9	5.0	211.4	216.4
1978/79:													
Sept.-Nov.	216.4	731.3	0.0	947.7	2.3	0.0	173.9	176.2	35.3	211.5	28.9	707.3	736.2
Dec.-Feb.	736.2	---	0.0	736.2	2.5	0.0	176.8	179.4	65.3	244.7	36.9	454.6	491.5
Mar.-May	491.5	---	0.0	491.5	2.8	1.3	115.2	119.3	50.0	169.3	42.8	279.4	322.2
June-Aug.	322.2	---	0.0	322.2	2.3	0.5	72.0	74.8	39.5	114.3	43.7	164.2	207.9
Mkt. year	216.4	731.3	0.0	947.7	10.0	1.8	537.9	549.7	190.1	739.8	43.7	164.2	207.9
1979/80:													
Sept.-Nov.	207.9	807.4	0.0	1,015.3	2.6	0.0	184.6	187.2	72.0	259.2	43.0	713.1	756.1
Dec.-Feb.	756.1	---	0.0	756.1	2.7	0.0	174.1	176.8	102.9	279.7	44.6	431.8	476.4
Mar.-May	476.4	---	0.0	476.4	3.0	1.4	102.2	106.6	92.3	198.8	45.6	232.0	277.6
June-Aug.	277.6	---	0.0	277.6	2.1	0.6	34.6	37.3	62.4	99.7	45.6	132.3	177.9
Mkt. year	207.9	807.4	0.0	1,015.3	10.4	2.0	495.3	507.7	329.7	837.4	45.6	132.3	177.9
1980/81:													
Sept.-Nov.	177.9	579.3	0.0	757.3	2.4	0.0	138.8	141.2	67.4	208.6	42.7	506.0	548.7
Dec.-Feb.	548.7	---	0.0	548.7	2.5	0.0	106.7	109.2	76.1	185.3	43.7	319.7	363.4
Mar.-May	363.4	---	0.0	363.4	2.3	1.4	107.1	110.8	68.0	178.8	43.8	140.8	184.6
June-Aug.	184.6	---	0.0	184.6	1.9	0.6	(29.9)	(27.4)	81.6	54.2	41.5	88.9	130.4
Mkt. year	177.9	579.3	0.0	757.3	9.1	2.0	322.6	333.7	293.2	626.9	41.5	88.9	130.4
1981/82:													
Sept.-Nov.	130.4	875.8	0.0	1,006.2	2.2	0.0	133.5	135.7	78.0	213.7	38.3	754.2	792.5
Dec.-Feb.	792.5	---	0.0	792.5	2.5	0.0	170.8	173.3	79.8	253.1	38.4	501.0	539.4
Mar.-May	539.4	---	0.0	539.4	2.1	1.4	109.2	112.7	47.1	159.8	38.3	341.3	379.6
June-Aug.	379.6	---	0.0	379.6	2.0	0.6	3.5	6.1	54.8	60.9	41.8	276.9	318.7
Mkt. year	130.4	875.8	0.0	1,006.3	8.8	2.0	417.2	428.0	259.6	687.6	41.8	276.9	318.7

See footnotes at end of table.

Continued--

Appendix table 9--Sorghum: Marketing year supply and disappearance, by quarter, 1975/76 to date --Continued

Year beginning September 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1982/83:													
Sept.-Nov.	318.7	835.1	0.0	1,153.8	2.1	0.0	168.1	170.2	58.0	228.2	45.5	880.1	925.6
Dec.-Feb.	925.6	---	0.0	925.6	2.2	0.0	166.4	168.5	72.4	240.9	48.2	636.5	684.7
Mar.-May	684.7	---	0.0	684.7	1.7	0.9	119.1	121.7	33.8	155.5	54.0	475.2	529.2
June-Aug.	529.2	---	0.0	529.2	1.9	0.9	41.3	44.1	45.9	90.0	171.5	267.7	439.2
Mkt. year	318.7	835.1	0.1	1,153.8	7.9	1.8	494.8	504.5	210.1	714.6	171.5	267.7	439.2
1983/84:													
Sept.-Nov.	439.2	487.5	0.0	926.7	2.1	0.0	125.1	127.2	67.5	194.7	190.4	541.6	732.0
Dec.-Feb.	732.0	---	0.0	732.0	2.1	0.0	126.1	128.2	71.6	199.8	61.4	470.8	532.2
Mar.-May	532.2	---	0.0	532.2	1.5	1.1	105.3	107.9	55.3	163.2	78.0	291.0	369.0
June-Aug.	369.0	---	0.1	369.1	2.0	1.2	28.2	31.4	50.2	81.6	102.8	184.7	287.5
Mkt. year	439.2	487.5	0.1	926.9	7.7	2.3	384.9	394.9	244.5	639.4	102.8	184.7	287.5
1984/85:													
Sept.-Nov.	287.5	866.2	0.0	1,153.7	4.1	0.0	209.9	214.0	85.8	299.8	93.1	760.8	853.9
Dec.-Feb.	853.9	---	0.1	854.0	4.5	0.0	201.4	205.9	87.3	293.2	105.2	455.6	560.8
Mar.-May	560.8	---	0.0	560.8	3.8	1.5	130.9	136.2	63.7	199.9	111.1	249.8	360.9
June-Aug.	360.9	---	0.0	360.9	2.9	0.5	(2.9)	0.5	60.1	60.6	112.1	188.2	300.3
Mkt. year	287.5	866.2	0.1	1,153.9	15.3	2.0	539.4	556.7	296.9	853.6	112.1	188.2	300.3
1985/86:													
Sept.-Nov.	300.3	1,120.3	0.0	1,420.6	7.6	0.0	230.4	238.0	70.2	308.3	138.6	973.7	1,112.3
Dec.-Feb.	1,112.3	---	0.0	1,112.3	7.9	0.0	232.8	240.7	43.1	283.9	175.2	653.3	828.5
Mar.-May	828.5	---	0.0	828.5	6.6	1.2	163.7	171.5	26.9	198.4	181.4	448.6	630.0
June-Aug.	630.0	---	0.0	630.0	3.9	0.5	36.9	41.3	37.7	79.0	207.2	343.8	551.0
Mkt. year	300.3	1,120.3	0.0	1,420.6	26.0	1.7	663.9	691.6	178.0	869.6	207.2	343.8	551.0
1986/87:													
Sept.-Nov.	551.0	938.9	0.0	1,489.9	2.8	0.0	180.4	183.3	47.5	230.7	292.1	967.1	1,259.2
Dec.-Feb.	1,259.2	---	0.0	1,259.2	2.9	0.0	182.3	185.3	56.2	241.4	364.9	652.8	1,017.7
Mar.-May	1,017.7	---	0.0	1,017.7	2.4	1.0	128.2	131.6	51.2	182.8	400.4	434.6	835.0
June-Aug.	835.0	---	0.0	835.0	2.2	0.6	45.3	48.1	43.5	91.6	408.9	334.4	743.3
Mkt. year	551.0	938.9	0.0	1,489.9	10.4	1.6	536.2	548.2	198.3	746.5	408.9	334.4	743.3
1987/88:													
Sept.-Nov.	743.3	730.8	0.0	1,474.1	4.9	0.0	171.3	176.2	45.5	221.7	465.3	787.1	1,252.4
Dec.-Feb.	1,252.4	---	0.0	1,252.4	5.1	0.0	173.1	178.2	63.1	241.3	545.5	465.6	1,011.1
Mar.-May	1,011.1	---	0.0	1,011.1	4.2	0.8	121.2	126.2	77.1	203.3	511.4	296.4	807.8
June-Aug.	807.8	---	0.0	807.9	9.3	0.5	89.6	99.4	45.8	145.2	463.6	199.1	662.7
Mkt. year	743.3	730.8	0.0	1,474.1	23.5	1.3	555.1	579.9	231.6	811.5	463.6	199.1	662.7
1988/89:													
Sept.-Nov.	662.7	576.7	0.0	1,239.3	5.9	0.0	171.3	177.1	64.5	241.6	432.9	564.8	997.7
Dec.-Feb.	997.7	---	0.0	997.7	6.1	0.0	173.1	179.2	93.5	272.6	396.4	328.7	725.1
Mar.-May	725.1	---	0.0	725.1	5.0	0.8	79.7	85.5	80.6	166.1	363.8	195.2	559.0
June-Aug.	559.0	---	0.0	559.0	3.5	0.7	42.3	46.5	73.0	119.5	340.9	98.6	439.5
Mkt. year	662.7	576.7	0.0	1,239.3	20.5	1.5	466.3	488.3	311.5	799.8	340.9	98.6	439.5

See footnotes at end of table.

Continued--

Appendix table 9--Sorghum: Marketing year supply and disappearance, by quarter, 1975/76 to date --Continued

Year beginning September 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1989/90:													
Sept.-Nov.	439.5	615.4	0.0	1,054.9	3.6	0.0	185.8	189.4	89.9	279.3	314.6	461.0	775.6
Dec.-Feb.	775.6	---	0.0	775.6	4.4	0.0	176.5	180.8	81.2	262.0	223.0	290.6	513.6
Mar.-May	513.6	---	0.1	513.7	2.5	0.7	94.2	97.4	81.3	178.7	190.2	144.8	335.0
June-Aug.	335.0	---	0.1	335.1	3.1	0.6	60.9	64.6	50.8	115.3	162.5	57.3	219.8
Mkt. year	439.5	615.4	0.2	1,055.2	13.6	1.3	517.3	532.2	303.2	835.4	162.5	57.3	219.8
1990/91:													
Sept.-Nov.	219.8	573.3	0.0	793.1	2.0	0.0	222.1	224.1	56.6	280.7	157.7	354.6	512.3
Dec.-Feb.	512.3	---	0.0	512.3	1.8	0.0	116.5	118.3	61.2	179.5	149.6	183.3	332.9
Mar.-May	332.9	---	0.1	332.9	1.8	0.7	32.4	34.9	76.0	110.9	108.4	113.6	222.0
June-Aug.	222.0	---	0.0	222.0	1.7	0.7	38.6	41.0	38.4	79.4	64.7	77.9	142.6
Mkt. year	219.8	573.3	0.1	793.1	7.3	1.4	409.6	418.4	232.2	650.5	64.7	77.9	142.6
1991/92:													
Sept.-Nov.	142.6	584.9	0.0	727.4	2.1	0.0	228.3	230.4	46.5	277.0	34.3	416.2	450.5
Dec.-Feb.	450.5	---	0.0	450.5	1.8	0.0	89.2	91.0	108.2	199.2	19.6	231.6	251.2
Mar.-May	251.2	---	0.0	251.2	1.9	1.1	32.9	35.9	105.0	140.9	14.3	96.1	110.4
June-Aug.	110.4	---	0.0	110.4	1.0	0.6	23.6	25.2	32.0	57.2	8.2	45.0	53.2
Mkt. year	142.6	584.9	0.0	727.5	6.8	1.7	374.0	382.5	291.7	674.3	8.2	45.0	53.2
1992/93:													
Sept.-Nov.	53.2	875.0	0.0	928.2	1.5	0.0	266.0	267.5	56.4	323.9	2.5	601.8	604.3
Dec.-Feb.	604.3	---	0.0	604.3	1.2	0.0	67.2	68.4	101.5	169.9	4.0	430.4	434.4
Mar.-May	434.4	---	0.0	434.4	1.8	0.7	79.7	82.2	87.4	169.6	3.9	260.9	264.8
June-Aug.	264.8	---	0.0	264.8	1.6	0.7	55.6	57.9	31.9	89.8	3.9	171.1	175.0
Mkt. year	53.2	875.0	0.0	928.2	6.1	1.4	468.5	476.0	277.2	753.2	3.9	171.1	175.0
1993/94:													
Sept.-Nov.	175.0	534.2	0.0	709.2	1.7	0.0	222.1	223.8	39.2	263.0	1.9	444.2	446.1
Dec.-Feb.	446.1	---	0.0	446.2	1.5	0.0	108.0	109.5	60.4	169.9	2.0	274.2	276.2
Mar.-May	276.2	---	0.0	276.2	1.7	0.8	81.9	84.4	63.7	148.1	2.0	126.1	128.1
June-Aug.	128.1	---	0.0	128.1	1.4	0.4	40.5	42.3	38.2	80.5	1.0	46.6	47.6
Mkt. year	175.0	534.2	0.0	709.2	6.3	1.2	452.6	460.1	201.6	661.6	1.0	46.6	47.6
1994/95:													
Sept.-Nov.	47.6	655.0	0.0	702.6	1.7	0.0	214.4	216.1	64.1	280.1	3.0	419.5	422.5
Dec.-Feb.	422.5	---	0.0	422.5	1.4	0.0	79.2	80.6	60.9	141.5	2.0	278.9	280.9
Mar.-May	280.9	---	0.0	280.9	1.5	0.4	65.9	67.8	54.4	122.2	1.0	157.8	158.8
June-Aug.	158.8	---	0.0	158.8	1.2	0.8	42.2	44.2	43.3	87.6	1.0	70.2	71.2
Mkt. year 2/	47.6	655.0	0.0	702.6	5.8	1.2	401.7	408.7	222.7	631.4	1.0	70.2	71.2
1995/96:													
Mkt. year 3/	71.2	463.6	0.0	534.9	5.8	1.2	315.0	322.0	170.0	492.0	1.0	40.0	42.9

--- = Not applicable.
1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected.

Appendix table 10--Barley: Marketing year supply and disappearance, by quarter, 1975/76 to date

Year beginning June 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1975/76:													
June-Aug.	92.0	379.2	4.0	475.2	36.4	0.0	61.3	97.7	3.7	101.4	0.0	373.8	373.8
Sept.-Nov.	373.8	---	3.0	376.8	31.8	1.1	39.0	71.9	5.0	76.9	0.0	299.9	299.9
Dec.-Feb.	299.9	---	3.6	303.5	29.2	1.3	46.0	76.5	6.1	82.6	0.0	220.9	220.9
Mar.-May	220.9	---	2.0	222.9	33.1	13.3	40.1	86.5	8.0	94.5	0.0	128.4	128.4
Mkt. year	92.0	379.2	12.6	483.8	130.5	15.7	186.4	332.6	22.8	355.4	0.0	128.4	128.4
1976/77:													
June-Aug.	128.4	383.0	3.9	515.3	37.9	0.0	63.1	101.0	8.1	109.1	0.0	406.2	406.2
Sept.-Nov.	406.2	---	1.0	407.2	31.9	1.3	42.4	75.6	26.7	102.3	0.0	304.9	304.9
Dec.-Feb.	304.9	---	1.8	306.7	30.5	1.5	36.0	68.0	18.7	86.7	0.0	220.0	220.0
Mar.-May	220.0	---	1.9	221.9	36.6	15.4	32.2	84.2	11.2	95.5	0.0	126.4	126.4
Mkt. year	128.4	383.0	8.6	520.0	136.9	18.2	173.7	328.8	64.8	393.6	0.0	126.4	126.4
1977/78:													
June-Aug.	126.4	427.8	3.4	557.5	36.6	0.0	48.1	84.7	25.1	109.8	0.0	447.7	447.7
Sept.-Nov.	447.7	---	0.8	448.5	31.8	1.2	37.7	70.7	19.5	90.2	0.0	358.3	358.3
Dec.-Feb.	358.3	---	1.8	360.1	32.2	1.3	45.7	79.2	5.5	84.7	0.0	275.4	275.4
Mar.-May	275.4	---	0.5	275.9	38.0	14.3	45.2	97.5	5.3	102.8	0.0	173.1	173.1
Mkt. year	126.4	427.8	6.4	560.6	138.6	16.8	176.6	332.0	55.5	387.5	0.0	173.1	173.1
1978/79:													
June-Aug.	173.1	454.8	1.5	629.4	41.3	0.0	62.5	103.8	14.2	118.0	0.8	510.6	511.4
Sept.-Nov.	511.4	---	1.0	512.4	36.5	1.0	48.7	86.2	8.3	94.5	1.2	416.7	417.9
Dec.-Feb.	417.9	---	2.2	420.1	35.5	1.1	50.7	87.3	0.9	88.2	2.1	329.8	331.9
Mar.-May	331.9	---	2.1	334.0	40.3	11.5	52.9	104.7	1.3	106.0	2.5	225.5	228.0
Mkt. year	173.1	454.8	6.7	634.6	153.6	13.6	214.7	381.9	24.6	406.6	2.5	225.5	228.0
1979/80:													
June-Aug.	228.0	383.2	1.7	612.9	41.0	0.0	64.7	105.7	7.4	113.0	2.8	497.1	499.9
Sept.-Nov.	499.9	---	1.1	501.0	37.3	1.0	47.2	85.5	19.6	105.1	3.0	392.9	395.9
Dec.-Feb.	395.9	---	2.0	397.9	37.1	1.1	47.6	85.8	10.9	96.7	3.2	298.0	301.2
Mar.-May	301.2	---	2.3	303.5	42.4	11.8	42.3	96.5	14.9	111.4	3.2	188.9	192.1
Mkt. year	228.0	383.2	7.2	618.4	157.8	13.9	201.7	373.4	52.8	426.3	3.2	188.9	192.1
1980/81:													
June-Aug.	192.1	361.1	1.3	554.5	44.6	0.0	58.5	103.1	17.9	120.9	3.4	430.2	433.6
Sept.-Nov.	433.6	---	1.3	434.9	38.4	1.1	40.1	79.6	18.8	98.5	3.4	333.0	336.4
Dec.-Feb.	336.4	---	1.5	337.9	36.5	1.3	35.3	73.1	26.7	99.8	3.4	234.7	238.1
Mar.-May	238.1	---	1.8	239.9	42.9	13.5	33.9	90.3	12.3	102.6	3.4	133.9	137.3
Mkt. year	192.1	361.1	5.9	559.1	162.4	15.9	167.8	346.1	75.7	421.8	3.4	133.9	137.3
1981/82:													
June-Aug.	137.3	473.5	1.1	611.9	43.1	0.0	56.5	99.6	20.2	119.8	3.3	488.8	492.1
Sept.-Nov.	492.1	---	1.1	493.2	36.7	1.1	52.1	89.9	37.0	126.8	3.3	363.1	366.4
Dec.-Feb.	366.4	---	2.5	368.9	36.6	1.3	43.9	81.8	24.1	105.8	3.3	259.8	263.1
Mar.-May	263.1	---	2.1	265.2	41.5	13.5	45.3	100.3	17.1	117.4	3.3	144.5	147.8
Mkt. year	137.3	473.5	6.9	617.7	157.9	15.9	197.7	371.5	98.4	469.9	3.3	144.5	147.8

See footnotes at end of table.

Continued--

Appendix table 10--Barley: Marketing year supply and disappearance, by quarter, 1975/76 to date --Continued

Year beginning June 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1982/83:													
June-Aug.	147.8	515.9	3.9	667.6	41.7	0.0	69.1	110.8	18.3	129.1	3.7	534.8	538.5
Sept.-Nov.	538.5	---	1.3	539.8	37.0	1.2	48.9	87.1	9.5	96.6	4.3	438.9	443.2
Dec.-Feb.	443.2	---	1.2	444.4	36.6	1.4	57.1	95.1	10.7	105.8	4.6	334.0	338.6
Mar.-May	338.6	---	2.0	340.6	41.6	14.6	62.0	118.2	5.7	123.9	6.0	210.7	216.7
Mkt. year	147.8	515.9	8.4	672.1	156.8	17.2	237.2	411.2	44.2	455.4	6.0	210.7	216.7
1983/84:													
June-Aug.	216.7	508.3	2.3	727.3	43.2	0.0	98.8	141.9	8.8	150.8	8.5	568.0	576.5
Sept.-Nov.	576.5	---	0.6	577.1	35.6	1.4	87.0	124.0	31.1	155.1	10.7	411.3	422.0
Dec.-Feb.	422.0	---	1.0	423.0	35.1	1.6	49.4	86.1	28.7	114.8	12.0	296.2	308.2
Mar.-May	308.2	---	1.1	309.3	40.6	16.5	42.6	99.8	20.1	119.9	11.9	177.5	189.4
Mkt. year	216.7	508.3	5.0	730.0	154.5	19.5	277.8	451.8	88.8	540.6	11.9	177.5	189.4
1984/85:													
June-Aug.	189.4	598.0	2.7	790.1	41.0	0.0	99.0	140.0	11.1	151.1	12.2	626.8	639.0
Sept.-Nov.	639.0	---	0.9	639.9	35.6	1.5	82.7	119.8	35.2	155.0	13.0	471.9	484.9
Dec.-Feb.	484.9	---	2.4	487.3	35.1	1.7	70.7	107.5	21.0	128.6	14.2	344.5	358.7
Mar.-May	358.7	---	1.5	360.2	41.4	18.2	48.9	108.5	4.3	112.8	15.6	231.8	247.4
Mkt. year	189.4	598.0	7.4	794.9	153.1	21.4	301.3	475.8	71.7	547.5	15.6	231.8	247.4
1985/86:													
June-Aug.	247.4	590.2	0.7	838.3	41.6	0.0	88.0	129.6	10.4	140.0	20.0	678.3	698.3
Sept.-Nov.	698.3	---	1.3	699.6	35.8	1.5	82.9	120.3	7.3	127.5	36.1	536.0	572.1
Dec.-Feb.	572.1	---	2.5	574.6	35.8	1.7	71.1	108.7	1.3	109.9	47.3	417.4	464.7
Mar.-May	464.7	---	1.7	466.4	43.3	18.1	77.1	138.5	0.8	139.2	57.4	269.8	327.2
Mkt. year	247.4	590.2	6.2	843.9	156.5	21.3	319.1	496.9	19.7	516.7	57.4	269.8	327.2
1986/87:													
June-Aug.	327.2	608.5	1.3	937.1	42.4	0.0	94.4	136.8	13.5	150.3	56.0	730.8	786.8
Sept.-Nov.	786.8	---	1.0	787.8	36.7	1.3	72.0	110.0	43.5	153.5	66.2	568.1	634.3
Dec.-Feb.	634.3	---	1.2	635.5	36.0	1.4	67.0	104.4	31.8	136.2	75.2	424.1	499.3
Mar.-May	499.3	---	3.1	502.4	41.8	15.2	64.3	121.3	44.8	166.1	75.5	260.8	336.3
Mkt. year	327.2	608.5	6.7	942.4	156.9	17.9	297.7	472.5	133.6	606.1	75.5	260.8	336.3
1987/88:													
June-Aug.	336.3	521.5	1.1	858.9	42.7	0.0	74.3	117.1	16.8	133.9	74.9	650.1	725.0
Sept.-Nov.	725.0	---	2.9	727.9	37.1	1.1	64.8	103.0	42.5	145.5	79.5	502.9	582.4
Dec.-Feb.	582.4	---	4.3	586.7	36.3	1.3	57.6	95.2	33.0	128.2	57.0	401.5	458.5
Mar.-May	458.5	---	3.0	461.5	42.0	13.3	56.5	111.8	28.6	140.4	50.1	271.0	321.1
Mkt. year	336.3	521.5	11.3	869.1	158.1	15.7	253.2	427.0	121.0	548.0	50.1	271.0	321.1
1988/89:													
June-Aug.	321.1	290.0	2.8	613.9	44.0	0.0	93.7	137.7	25.8	163.5	35.9	414.5	450.4
Sept.-Nov.	450.4	---	2.2	452.6	38.4	1.1	28.4	67.8	12.6	80.5	35.9	336.2	372.1
Dec.-Feb.	372.1	---	2.8	374.9	36.2	1.2	41.6	79.1	15.3	94.3	34.1	246.5	280.6
Mar.-May	280.6	---	2.7	283.3	41.8	12.7	7.2	61.7	25.2	86.9	30.4	166.0	196.4
Mkt. year	321.1	290.0	10.5	621.6	160.4	15.0	170.9	346.3	78.9	425.2	30.4	166.0	196.4

See footnotes at end of table.

Continued--

Appendix table 10--Barley: Marketing year supply and disappearance, by quarter, 1975/76 to date --Continued

Year beginning June 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1989/90:													
June-Aug.	196.4	404.2	3.6	604.2	45.7	0.0	114.0	159.7	26.5	186.2	36.6	381.3	417.9
Sept.-Nov.	417.9	---	2.0	419.9	39.3	0.9	11.9	52.1	17.2	69.3	36.3	314.3	350.6
Dec.-Feb.	350.6	---	3.3	353.9	37.2	1.1	40.2	78.5	22.7	101.2	32.1	220.6	252.7
Mar.-May	252.7	---	4.2	256.9	39.8	11.5	27.3	78.5	17.6	96.1	19.3	141.5	160.8
Mkt. year	196.4	404.2	13.1	613.7	162.0	13.5	193.3	368.8	84.0	452.9	19.3	141.5	160.8
1990/91:													
June-Aug.	160.8	422.2	1.0	584.0	44.7	0.0	97.6	142.3	30.9	173.2	14.3	396.6	410.9
Sept.-Nov.	410.9	---	1.3	412.1	39.0	1.0	41.2	81.2	25.2	106.4	12.1	293.6	305.7
Dec.-Feb.	305.7	---	4.2	309.9	37.6	1.2	41.6	80.4	18.6	99.0	9.6	201.3	210.9
Mar.-May	210.9	---	7.0	217.9	39.8	12.4	24.3	76.6	6.0	82.5	8.4	127.0	135.4
Mkt. year	160.8	422.2	13.5	596.5	161.1	14.6	204.8	380.5	80.6	461.1	8.4	127.0	135.4
1991/92:													
June-Aug.	135.4	464.3	7.4	607.1	45.2	0.0	108.5	153.7	13.5	167.2	7.7	432.3	440.0
Sept.-Nov.	440.0	---	3.5	443.4	37.8	0.9	39.7	78.4	36.7	115.0	7.0	321.4	328.4
Dec.-Feb.	328.4	---	6.5	334.8	36.9	1.0	56.4	94.3	24.6	119.0	6.8	209.1	215.9
Mar.-May	215.9	---	7.2	223.1	43.4	11.0	20.3	74.7	19.7	94.5	6.5	122.1	128.6
Mkt. year	135.4	464.3	24.5	624.2	163.3	12.9	224.9	401.1	94.5	495.6	6.5	122.1	128.6
1992/93:													
June-Aug.	128.6	455.1	6.6	590.2	43.2	0.0	110.3	153.5	18.4	171.8	5.8	412.6	418.4
Sept.-Nov.	418.4	---	1.5	419.9	36.5	0.9	13.9	51.3	22.0	73.4	5.4	341.2	346.6
Dec.-Feb.	346.6	---	1.4	348.0	36.2	1.0	45.0	82.2	21.9	104.1	5.5	238.4	243.9
Mar.-May	243.9	---	1.9	245.8	42.5	11.2	23.0	76.7	17.9	94.6	5.4	145.8	151.2
Mkt. year	128.6	455.1	11.4	595.1	158.4	13.1	192.1	363.6	80.3	443.9	5.4	145.8	151.2
1993/94:													
June-Aug.	151.2	398.0	3.2	552.4	43.4	0.0	91.7	135.1	14.6	149.7	5.4	397.3	402.7
Sept.-Nov.	402.7	---	10.8	413.5	37.2	0.8	26.9	64.9	15.2	80.0	5.3	328.1	333.4
Dec.-Feb.	333.4	---	23.7	357.1	36.8	0.9	83.0	120.7	12.1	132.8	5.3	219.0	224.3
Mar.-May	224.3	---	33.9	258.1	45.5	10.1	39.5	95.1	24.1	119.3	5.2	133.7	138.9
Mkt. year	151.2	398.0	71.5	620.7	162.9	11.8	241.1	415.8	66.1	481.8	5.2	133.7	138.9
1994/95:													
June-Aug.	138.9	374.9	24.1	537.8	43.4	0.0	122.2	165.6	20.3	186.0	6.0	345.9	351.9
Sept.-Nov.	351.9	---	13.8	365.7	37.0	0.8	30.5	68.3	18.6	86.9	5.7	273.2	278.9
Dec.-Feb.	278.9	---	13.5	292.4	37.0	0.9	51.0	88.9	10.5	99.4	5.5	187.5	193.0
Mar.-May	193.0	---	14.4	207.4	46.4	9.5	22.1	78.0	16.7	94.8	5.0	107.6	112.6
Mkt. year 2/	138.9	374.9	65.9	579.6	163.8	11.2	225.8	400.8	66.2	467.0	5.0	107.6	112.6
1995/96:													
June-Aug.	112.6	361.4	11.9	485.8	43.0	0.0	114.5	157.5	16.6	174.1	5.8	305.9	311.7
Mkt. year 3/	112.6	361.4	55.0	528.9	163.2	11.8	215.0	390.0	50.0	440.0	5.0	83.9	88.9

--- = Not applicable.
1/ Includes quantity under loan and farmer-owned reserve. 2/ Preliminary. 3/ Projected.

Appendix table 11--Oats: Marketing year supply and disappearance, by quarter, 1975/76 to date

Year beginning June 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned	Total
	Million bushels												
1975/76:													
June-Aug.	224.0	639.0	0.2	863.2	11.3	0.0	172.2	183.5	0.4	184.0	4.8	674.5	679.3
Sept.-Nov.	679.3	---	0.0	679.3	11.0	4.8	124.7	140.5	7.1	147.6	0.0	531.7	531.7
Dec.-Feb.	531.7	---	0.2	531.9	11.0	1.2	137.9	150.1	2.7	152.8	0.0	379.1	379.1
Mar.-May	379.1	---	0.1	379.1	10.7	34.3	127.2	172.2	2.1	174.3	24.9	179.9	204.8
Mkt. year	224.0	639.0	0.5	863.5	44.0	40.3	562.1	646.4	12.3	658.7	24.9	179.9	204.8
1976/77:													
June-Aug.	204.8	540.4	0.1	745.3	10.9	0.0	147.1	158.0	2.7	160.7	0.0	584.7	584.7
Sept.-Nov.	584.7	---	0.1	584.7	10.5	5.2	116.7	132.5	4.6	137.1	0.0	447.6	447.6
Dec.-Feb.	447.6	---	0.4	448.0	10.5	1.3	122.6	134.4	0.7	135.1	0.0	312.9	312.9
Mar.-May	312.9	---	0.8	313.7	10.6	37.1	101.5	149.2	0.3	149.4	0.0	164.3	164.3
Mkt. year	204.8	540.4	1.4	746.6	42.4	43.7	487.9	574.0	8.3	582.3	0.0	164.3	164.3
1977/78:													
June-Aug.	164.3	752.8	0.9	918.0	10.9	0.0	167.0	177.8	2.0	179.8	0.0	738.2	738.2
Sept.-Nov.	738.2	---	0.4	738.6	10.6	4.7	116.4	131.7	4.1	135.8	0.0	602.8	602.8
Dec.-Feb.	602.8	---	0.4	603.2	10.2	1.2	115.5	126.9	3.0	129.9	0.0	473.3	473.3
Mar.-May	473.3	---	0.3	473.7	10.3	33.4	116.0	159.7	1.0	160.6	0.0	313.1	313.1
Mkt. year	164.3	752.8	2.1	919.2	42.0	39.3	514.8	596.1	10.0	606.1	0.0	313.1	313.1
1978/79:													
June-Aug.	313.1	581.7	0.2	894.9	11.1	0.0	170.8	181.9	7.0	188.9	0.8	705.2	706.0
Sept.-Nov.	706.0	---	0.1	706.1	10.4	4.1	111.8	126.3	1.7	128.0	2.0	576.1	578.1
Dec.-Feb.	578.1	---	0.2	578.3	10.5	1.0	125.5	137.0	1.3	138.3	2.4	437.6	440.0
Mar.-May	440.0	---	0.2	440.2	9.0	28.7	122.2	159.9	0.3	160.2	2.7	277.3	280.0
Mkt. year	313.1	581.7	0.6	895.3	41.0	33.8	530.2	605.0	10.3	615.4	2.7	277.3	280.0
1979/80:													
June-Aug.	280.0	526.7	0.2	806.9	11.0	0.0	168.5	179.5	0.3	179.7	2.3	624.9	627.2
Sept.-Nov.	627.2	---	0.2	627.4	10.5	3.9	106.6	120.9	1.1	122.1	2.5	502.8	505.3
Dec.-Feb.	505.3	---	0.1	505.4	10.3	1.0	105.7	117.0	0.8	117.8	2.3	385.4	387.7
Mar.-May	387.7	---	0.2	387.9	8.9	27.5	114.5	150.9	0.6	151.5	2.7	233.7	236.4
Mkt. year	280.0	526.7	0.8	807.5	40.7	32.3	495.3	568.3	2.8	571.1	2.7	233.7	236.4
1980/81:													
June-Aug.	236.4	458.8	0.4	695.7	11.3	0.0	144.7	156.0	1.5	157.6	2.2	535.9	538.1
Sept.-Nov.	538.1	---	0.2	538.3	10.3	4.0	100.1	114.4	2.1	116.6	2.1	419.7	421.8
Dec.-Feb.	421.8	---	0.2	421.9	9.9	1.0	103.3	114.2	2.1	116.3	1.9	303.7	305.6
Mar.-May	305.6	---	0.3	305.9	9.4	28.1	88.3	125.8	3.1	128.9	2.3	174.7	177.0
Mkt. year	236.4	458.8	1.1	696.4	41.0	33.0	436.5	510.5	8.8	519.3	2.3	174.7	177.0
1981/82:													
June-Aug.	177.0	509.5	0.2	686.8	12.1	0.0	157.7	169.8	1.4	171.2	1.9	513.7	515.6
Sept.-Nov.	515.6	---	0.2	515.8	10.6	4.1	105.3	120.0	0.7	120.7	1.9	393.2	395.1
Dec.-Feb.	395.1	---	0.1	395.3	9.9	1.0	101.1	112.1	0.3	112.4	1.7	281.2	282.9
Mar.-May	282.9	---	0.9	283.8	8.6	29.1	93.9	131.6	0.3	131.9	0.7	151.2	151.9
Mkt. year	177.0	509.5	1.5	688.0	41.2	34.2	458.0	533.4	2.7	536.1	0.7	151.2	151.9

See footnotes at end of table.

Continued--

Appendix table 11--Oats: Marketing year supply and disappearance, by quarter, 1975/76 to date --Continued

Year beginning June 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned	Total
	Million bushels												
1982/83:													
June-Aug.	151.9	592.6	0.6	745.2	12.2	0.0	127.1	139.3	0.2	139.5	0.5	605.3	605.8
Sept.-Nov.	605.8	---	0.2	605.9	10.6	5.2	102.9	118.7	0.4	119.1	0.7	486.1	486.8
Dec.-Feb.	486.8	---	0.8	487.5	10.4	1.3	108.1	119.8	0.1	119.9	0.7	366.9	367.6
Mar.-May	367.6	---	2.0	369.6	8.5	36.8	104.3	149.6	0.0	149.7	0.7	219.1	219.8
Mkt. year	151.9	592.6	3.5	748.1	41.7	43.3	442.4	527.4	0.8	528.2	0.7	219.1	219.8
1983/84:													
June-Aug.	219.8	476.5	9.2	705.4	11.9	0.0	141.9	153.8	0.1	153.9	0.7	550.8	551.5
Sept.-Nov.	551.5	---	6.1	557.6	10.4	3.5	126.2	140.2	0.5	140.7	1.4	415.5	416.9
Dec.-Feb.	416.9	---	6.2	423.1	10.3	0.9	108.4	119.6	0.1	119.7	1.4	302.1	303.5
Mar.-May	303.5	---	8.4	311.9	8.3	25.1	97.5	130.8	0.2	131.1	1.5	179.4	180.9
Mkt. year	219.8	476.5	29.9	726.2	40.9	29.5	474.0	544.4	0.9	545.3	1.5	179.4	180.9
1984/85:													
June-Aug.	180.9	473.7	2.0	656.6	11.8	0.0	126.9	138.7	0.1	138.8	1.4	516.3	517.7
Sept.-Nov.	517.7	---	8.7	526.4	10.5	3.7	115.1	129.3	0.2	129.5	1.4	395.6	397.0
Dec.-Feb.	397.0	---	12.2	409.1	10.2	0.9	101.6	112.8	0.1	112.9	1.4	294.9	296.3
Mar.-May	296.3	---	10.8	307.0	8.5	26.5	92.0	127.0	0.1	127.1	1.4	178.5	179.9
Mkt. year	180.9	473.7	33.6	688.2	41.0	31.2	435.6	507.8	0.5	508.3	1.4	178.5	179.9
1985/86:													
June-Aug.	179.9	518.5	4.4	702.8	12.8	0.0	135.8	148.7	0.1	148.8	1.5	552.6	554.1
Sept.-Nov.	554.1	---	4.2	558.3	11.2	3.9	118.1	133.2	0.3	133.5	1.9	422.9	424.8
Dec.-Feb.	424.8	---	8.9	433.7	10.9	1.0	109.3	121.2	0.1	121.2	2.0	310.4	312.4
Mar.-May	312.4	---	9.7	322.1	9.0	27.6	101.0	137.7	0.8	138.4	1.9	181.8	183.7
Mkt. year	179.9	518.5	27.2	725.6	44.0	32.5	464.2	540.7	1.2	541.9	1.9	181.8	183.7
1986/87:													
June-Aug.	183.7	385.0	8.7	577.4	13.1	0.0	112.5	125.6	0.2	125.9	2.4	449.1	451.5
Sept.-Nov.	451.5	---	4.8	456.3	11.5	4.6	97.8	113.9	0.3	114.2	3.2	339.0	342.2
Dec.-Feb.	342.2	---	9.2	351.4	11.1	1.1	90.5	102.8	0.1	102.9	3.6	244.9	248.5
Mar.-May	248.5	---	9.6	258.1	9.3	32.3	83.7	125.2	0.3	125.5	3.5	129.1	132.6
Mkt. year	183.7	385.0	32.4	601.0	45.0	38.0	384.5	467.5	0.9	468.4	3.5	129.1	132.6
1987/88:													
June-Aug.	132.6	373.7	7.0	513.3	14.5	0.0	104.8	119.3	0.2	119.5	3.3	390.5	393.8
Sept.-Nov.	393.8	---	8.1	401.9	12.7	3.8	91.1	107.6	0.1	107.8	3.4	290.7	294.1
Dec.-Feb.	294.1	---	15.8	309.9	12.3	0.9	84.3	97.6	0.1	97.7	3.4	208.8	212.2
Mar.-May	212.2	---	14.8	227.0	10.2	26.9	77.9	115.0	0.1	115.1	3.5	108.5	112.0
Mkt. year	132.6	373.7	45.7	552.0	49.8	31.6	358.2	439.6	0.5	440.1	3.5	108.5	112.0
1988/89:													
June-Aug.	112.0	217.4	12.3	341.7	21.2	0.0	56.7	77.9	0.2	78.1	3.0	260.6	263.6
Sept.-Nov.	263.6	---	11.9	275.5	18.6	3.3	49.3	71.1	0.1	71.3	2.5	201.7	204.2
Dec.-Feb.	204.2	---	20.1	224.3	18.0	0.8	45.6	64.4	0.2	64.6	2.6	157.1	159.7
Mar.-May	159.7	---	18.6	178.3	15.0	23.0	42.2	80.1	0.1	80.2	2.4	95.9	98.3
Mkt. year	112.0	217.4	62.9	392.3	72.7	27.1	193.8	293.6	0.6	294.2	2.4	95.9	98.3

See footnotes at end of table.

Continued--

Appendix table 11--Oats: Marketing year supply and disappearance, by quarter, 1975/76 to date --Continued

Year beginning June 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned	Total
	Million bushels												
1989/90:													
June-Aug.	98.3	373.6	17.0	488.9	26.6	0.0	88.7	115.3	0.2	115.6	1.3	372.0	373.3
Sept.-Nov.	373.3	---	17.5	390.8	23.3	2.7	77.2	103.2	0.3	103.5	1.2	286.1	287.3
Dec.-Feb.	287.3	---	15.7	303.0	22.6	0.7	64.8	88.1	0.2	88.2	1.1	213.6	214.7
Mar.-May	214.7	---	16.3	231.0	19.1	20.0	34.8	73.9	0.2	74.1	0.7	156.2	156.9
Mkt. year	98.3	373.6	66.4	538.3	91.6	23.4	265.6	380.6	0.8	381.4	0.7	156.2	156.9
1990/91:													
June-Aug.	156.9	357.7	17.5	532.1	28.7	0.0	151.5	180.2	0.2	180.4	0.6	351.1	351.7
Sept.-Nov.	351.7	---	11.7	363.4	24.7	2.2	42.2	69.1	0.2	69.3	0.6	293.5	294.1
Dec.-Feb.	294.1	---	18.2	312.3	24.6	0.5	57.9	83.0	0.1	83.1	0.5	228.8	229.3
Mar.-May	229.3	---	16.0	245.2	22.9	16.4	34.6	73.9	0.1	74.0	0.3	170.9	171.2
Mkt. year	156.9	357.7	63.4	578.0	100.9	19.1	286.1	406.1	0.6	406.7	0.3	170.9	171.2
1991/92:													
June-Aug.	171.2	243.9	21.7	436.8	30.5	0.0	122.1	152.6	0.1	152.7	0.3	283.8	284.1
Sept.-Nov.	284.1	---	17.3	301.4	26.5	2.1	28.0	56.6	0.2	56.8	0.3	244.3	244.6
Dec.-Feb.	244.6	---	17.6	262.3	26.0	0.5	60.7	87.2	0.2	87.4	0.3	174.6	174.9
Mar.-May	174.9	---	18.1	193.0	24.2	15.2	24.5	63.9	1.4	65.3	0.2	127.5	127.7
Mkt. year	171.2	243.9	74.8	489.8	107.2	17.8	235.2	360.2	1.9	362.1	0.2	127.5	127.7
1992/93:													
June-Aug.	127.7	294.2	15.1	437.1	30.5	0.0	110.9	141.4	1.0	142.5	0.1	294.5	294.6
Sept.-Nov.	294.6	---	11.9	306.5	26.5	2.1	33.4	62.0	2.1	64.0	0.1	242.4	242.5
Dec.-Feb.	242.5	---	10.7	253.2	26.0	0.5	50.2	76.7	1.4	78.1	0.1	175.0	175.1
Mar.-May	175.1	---	17.2	192.4	24.2	15.2	38.5	77.9	1.3	79.2	0.1	113.1	113.2
Mkt. year	127.7	294.2	55.0	476.9	107.2	17.8	233.0	358.0	5.7	363.7	0.1	113.1	113.2
1993/94:													
June-Aug.	113.2	206.8	16.8	336.8	31.9	0.0	84.3	116.2	1.5	117.8	0.1	218.9	219.0
Sept.-Nov.	219.0	---	34.9	253.9	27.7	1.7	30.1	59.5	0.7	60.2	0.0	193.7	193.7
Dec.-Feb.	193.7	---	31.4	225.1	26.8	0.4	50.8	78.0	0.5	78.5	0.0	146.6	146.6
Mar.-May	146.6	---	23.8	170.3	23.6	12.9	28.1	64.6	0.2	64.8	0.0	105.5	105.5
Mkt. year	113.2	206.8	106.8	426.8	110.0	15.0	193.3	318.3	3.0	321.3	0.0	105.5	105.5
1994/95:													
June-Aug.	105.5	229.0	20.4	354.9	32.0	0.0	102.9	134.9	0.2	135.1	0.1	219.8	219.9
Sept.-Nov.	219.9	---	34.0	253.9	28.1	1.6	31.9	61.6	0.2	61.8	0.0	192.1	192.1
Dec.-Feb.	192.1	---	22.9	214.9	27.1	0.4	38.1	65.6	0.4	66.0	0.0	149.0	149.0
Mar.-May	149.0	---	15.9	164.9	23.8	12.0	28.3	64.1	0.2	64.3	0.0	100.6	100.6
Mkt. year 1/	105.5	229.0	93.2	427.7	111.0	14.0	201.1	326.1	1.0	327.1	0.0	100.6	100.6
1995/96:													
June-Aug.	100.6	163.2	27.8	291.6	32.0	0.0	79.0	111.0	0.4	111.5	0.1	180.0	180.1
Mkt. year 2/	100.6	163.2	105.0	368.8	110.2	14.8	155.0	280.0	1.0	281.0	0.0	87.8	87.8

--- = Not applicable.
1/ Preliminary. 2/ Projected.

Appendix table 12--Farm programs and participation, 1975-95

Crop Year	Target price	Loan rate	Acreage 1/ reduction program	Deficiency payment rate	Diversion payment rate	Partici-pation rate	NAP or Base	Area idled 2/	--Area planted-- total	program
	------$/bu.------		Percent	--$/bu.--	$/acre	Percent		----------Million acres----------		
Corn:										
1975	1.38	1.10	0	0	0	100.0	60.9	0	78.7	78.7
1976	1.57	1.50	0	0	0	100.0	60.9	0	84.6	84.6
1977	2.00	2.00	0	0	0	100.0	60.9	0	84.3	84.3
1978	2.10	2.00	10/+10	0.03	0.20	40.0	76.2	3.2/2.9	81.7	32.3
1979	2.20	2.10	10/+10	0	1.00	21.0	85.7	1.7/1.2	81.4	17.2
1980	2.35	2.25	0	0	0	100.0	84.1	0	84.0	84.0
1981	2.40	2.40	0	0	0	100.0	80.5	0	84.1	84.1
1982	2.70	2.55	10.0	0.15	0	29.0	81.3	2.1	81.9	19.1
1983 3/	2.86	2.65	10/10/+10-30	0	1.50/80	71.0	82.6	4.4/27.8	60.2	25.0
1984	3.03	2.55	10.0	0.43	0	54.0	80.8	3.9	80.5	34.7
1985	3.03	2.55	10.0	0.48	0	69.0	84.2	5.4	83.4	48.8
1986	3.03	1.92	17.5/2.5/50-92	1.11	0.73	85.7	81.7	11.9/2.4	76.6	54.8
1987	3.03	1.82	20/+15/50-92	1.09	2.00	90.5	81.5	14.7/8.4	66.2	51.2
1988	2.93	1.77	20/+10/0-92	0.36	1.75	87.1	82.9	14.4/6.1	67.7	51.0
1989	2.84	1.65	10/0-92	0.58	0	79.5	82.7	6.3/4.5	72.2	51.8
1990	2.75	1.57	10/0-92	0.51	0	77.4	82.6	6.1/4.6	74.2	54.3
1991	2.75	1.62	7.5/0-92	0.41	0	76.5	82.7	4.7/2.7	76.0	52.9
1992	2.75	1.72	5.0/0-92	0.73	0	75.7	82.2	3.1/2.2	79.3	53.3
1993	2.75	1.72	10.0/0-92	0.28	0	81.3	81.8	6.6/4.3	73.2	52.0
1994	2.75	1.89	0;0/85-92	0.57	0	81.6	81.5	0/2.4	79.2	59.3
1995 4/	2.75	1.89	7.5;0/85-92	0	0	76.0	81.9	4.7/3.0	71.4	50.3
Sorghum:										
1975	1.31	1.05	0	0	0	100.0	16.4	0	18.1	18.1
1976	1.49	1.43	0	0	0	100.0	16.4	0	18.1	18.1
1977	2.28	1.90	0	0	0	100.0	16.4	0	16.6	16.6
1978	2.28	1.90	10/+10	0.33	0.12	65.0	13.7	1.1/0.3	16.2	10.6
1979	2.34	2.00	10/+10	0.13	1.00	56.0	15.9	0.8/0.3	15.3	8.5
1980	2.50	2.14	0	0	0	100.0	12.8	0	15.6	15.3
1981	2.55	2.28	0	0.27	0	100.0	14.3	0	15.9	16.1
1982	2.60	2.42	10.0	0.18	0	47.0	17.7	0.7	16.0	6.1
1983 3/	2.72	2.52	10/10/+10-30	0	1.50/80	72.0	17.6	0.8/4.9	11.9	4.6
1984	2.88	2.42	10.0	0.46	0	42.0	18.4	0.6	17.2	5.6
1985	2.88	2.42	10.0	0.46	0	55.0	19.3	0.9	18.3	8.4
1986	2.88	1.82	17.5/2.5/50-92	1.06	0.65	74.0	19.0	2.1/0.8	15.3	9.2
1987	2.88	1.74	20/+15/50-92	1.14	1.90	85.0	17.4	2.4/1.7	11.8	8.4
1988	2.78	1.68	20/+10/0-92	0.48	1.65	82.0	16.8	2.2/1.7	10.3	7.2
1989	2.70	1.57	10/0-92	0.66	0	70.8	16.2	1.1/2.2	12.6	7.7
1990	2.61	1.49	10/0-92	0.56	0	70.2	15.4	1.0/2.3	10.5	7.1
1991	2.61	1.54	7.5/0-92	0.37	0	77.1	13.5	0.8/1.7	11.1	7.3
1992	2.61	1.63	5.0/0-92	0.72	0	78.6	13.6	0.5/1.5	13.2	7.5
1993	2.61	1.63	5.0/0-92	0.25	0	81.6	13.5	0.6/1.7	9.9	6.8
1994	2.61	1.80	0;0/85-92	0.59	0	81.1	13.5	0/1.6	9.8	6.8
1995 4/	2.61	1.80	0;0/85-92	0	0	76.9	13.4	0/1.7	9.2	6.1

See footnotes at end of table.

Continued--

Appendix table 12--Farm programs and participation, 1975-95--Continued

Crop Year	Target price	Loan rate	Acreage 1/ reduction program	Deficiency payment rate	Diversion payment rate	Partici-pation rate	NAP or Base	Area idled 2/	--Area planted-- total	program
	------$/bu.------		Percent	--$/bu.--	$/acre	Percent		----------Million acres----------		
Barley:										
1975	1.13	0.90	0	0	0	0	11.7	0	9.4	9.4
1976	1.28	1.22	0	0	0	0	11.7	0	9.3	9.3
1977	2.15	1.63	0	0.50	0	0	11.7	0	10.8	10.8
1978	2.25	1.63	10/0+10	0.35	1.20	58.0	7.5	0.8	10.0	5.8
1979	2.40	1.71	20/0+0	0.11	0	42.0	7.8	0.7	8.1	3.4
1980	2.55	1.83	0	0	0	0	8.3	0	8.3	8.3
1981	2.60	1.95	0	0.11	0	0	10.2	0	9.6	9.6
1982	2.60	2.08	10	0.40	0	46.0	10.5	0.4	9.5	4.6
1983	2.60	2.16	10/10	0.21	1.00	55.0	10.2	1.1	10.0	6.1
1984	2.60	2.08	10	0.26	0	44.0	11.6	0.5	11.9	4.1
1985	2.60	2.08	10	0.52	0	57.0	13.3	0.7	13.1	6.4
1986	2.60	1.56	17.5/2.5/50-92	0.99	0.57	73.0	12.4	1.8/0.2	13.0	7.3
1987	2.60	1.49	20/0+15/50-92	0.79	1.60	84.6	12.5	2.6/0.3	10.9	8.1
1988	2.51	1.44	20/0+10/0-92	0	1.40	79.1	12.4	2.2/0.6	9.8	6.5
1989	2.43	1.34	10/0-92	0	0	66.6	12.3	0.8/1.5	9.1	5.5
1990	2.36	1.28	10/0-92	0.20	0	68.2	11.9	0.7/2.2	8.2	4.7
1991	2.36	1.32	7.5/0-92	0.62	0	75.9	11.5	0.7/1.5	8.9	5.8
1992	2.36	1.40	5.0/0-92	0.56	0	75.1	11.1	0.4/1.9	7.8	4.7
1993	2.36	1.40	0.0/0-92	0.67	0	82.5	10.8	0.0/2.5	7.8	5.1
1994	2.36	1.54	0;0/85-92	0.57	0	83.9	10.7	0.0/2.7	7.2	4.8
1995 4/	2.36	1.54	0;0/85-92	0	0	82.0	10.7	0.0/2.9	6.7	4.4
Oats:										
1975	0	0.54	0	0	0	0	0	0	16.4	0
1976	0	0.72	0	0	0	0	0	0	16.6	0
1977	0	1.03	0	0	0	0	0	0	17.7	0
1978	0	1.03	0	0	0	0	0	0	16.4	0
1979	0	1.08	0	0	0	0	0	0	14.0	0
1980	0	1.16	0	0	0	0	0	0	13.4	0
1981	0	1.24	0	0	0	0	0	0	13.6	0
1982	1.50	1.31	10	0	0	14.0	10.4	0.1	14.0	1.0
1983	1.60	1.36	10/10	0.11	0.75	20.0	10.1	0.3	12.3	1.0
1984	1.60	1.31	10	0	0	14.0	9.8	0.1	12.4	0.7
1985	1.60	1.31	10	0.29	0	14.0	9.4	0.1	13.2	0.6
1986	1.60	0.99	17.5/2.5/50-92	0.39	0.36	37.0	9.2	0.4/0.1	14.7	1.5
1987	1.60	0.94	20/+15/50-92	0.20	0.80	44.7	8.4	0.7/0.1	17.9	2.8
1988	1.55	0.91	5/0-92	0	0	30.0	7.9	0.1/0.2	13.9	1.3
1989	1.50	0.85	5/0-92	0	0	18.4	7.6	0.1	12.1	1.0
1990	1.45	0.81	5/0-92	0.32	0	9.2	7.5	0/0.2	10.4	0.4
1991	1.45	0.83	0/0-92	0.35	0	37.9	7.3	0/0.6	8.7	1.6
1992	1.45	0.88	0/0-92	0.17	0	40.4	7.2	0/0.7	7.9	1.5
1993	1.45	0.88	0/0-92	0.11	0	45.7	7.1	0/0.8	7.9	1.4
1994	1.45	0.97	0;0/85-92	0.24	0	39.8	6.8	0/0.6	6.6	1.2
1995 4/	1.45	0.97	0;0/85-92	0	0	43.9	6.6	0/0.8	6.3	1.0

1/ + denotes optional diversion program. 2/ The first number is the acreage set-aside (ARP) and diverted (DIV); the second number is acreage set aside under payment-in-kind, 50-92 and 0-92 programs. 3/ The second acreage reduction figure represents the paid diversion program and the third is payment-in-kind (PIK) program. 4/ Program data based on preliminary program compliance results.

Appendix table 13--Average prices received by farmers, United States, by month, and loan rate, 1973-95 1/

Year	Sept.	Oct. 2/	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average 3/	Loan rate
							$/bu.							
Corn:														
1973	2.15	2.17	2.18	2.39	2.59	2.76	2.68	2.41	2.45	2.57	2.91	3.37	2.55	1.05
1974	3.30	3.45	3.32	3.27	3.07	2.86	2.67	2.68	2.66	2.68	2.72	2.95	3.02	1.10
1975	2.76	2.62	2.33	2.37	2.44	2.48	2.50	2.46	2.61	2.74	2.82	2.64	2.54	1.10
1976	2.60	2.33	2.02	2.24	2.34	2.34	2.35	2.31	2.25	2.12	1.88	1.63	2.15	1.50
1977	1.60	1.67	1.88	1.97	2.00	2.03	2.15	2.24	2.29	2.28	2.16	2.01	2.02	2.00
1978	1.98	1.97	2.02	2.09	2.11	2.18	2.22	2.27	2.35	2.49	2.64	2.54	2.25	2.00
1979	2.51	2.41	2.27	2.38	2.45	2.39	2.40	2.36	2.42	2.49	2.73	2.92	2.48	2.10
1980	3.01	2.99	3.10	3.19	3.19	3.22	3.25	3.24	3.24	3.17	3.14	2.87	3.12	2.25
1981	2.55	2.45	2.34	2.39	2.54	2.44	2.46	2.55	2.60	2.57	2.50	2.30	2.47	2.40
1982	2.15	1.98	2.13	2.26	2.36	2.56	2.71	2.95	3.03	3.04	3.13	3.35	2.55	2.55
1983	3.32	3.15	3.17	3.15	3.15	3.11	3.21	3.32	3.34	3.36	3.30	3.12	3.21	2.65
1984	2.90	2.65	2.55	2.56	2.64	2.62	2.67	2.70	2.68	2.64	2.60	2.44	2.63	2.55
1985	2.29	2.11	2.21	2.29	2.33	2.32	2.29	2.30	2.39	2.32	2.00	1.73	2.23	2.55
1986	1.45	1.40	1.47	1.50	1.48	1.42	1.47	1.52	1.66	1.69	1.60	1.47	1.50	1.92
1987	1.49	1.55	1.61	1.72	1.77	1.83	1.86	1.88	1.94	2.41	2.72	2.65	1.94	1.82
1988	2.60	2.58	2.51	2.53	2.60	2.59	2.60	2.56	2.58	2.52	2.47	2.27	2.54	1.77
1989	2.29	2.22	2.24	2.27	2.31	2.32	2.37	2.51	2.62	2.63	2.62	2.51	2.36	1.65
1990	2.32	2.19	2.16	2.22	2.27	2.32	2.39	2.42	2.38	2.31	2.27	2.33	2.28	1.57
1991	2.33	2.31	2.29	2.33	2.40	2.46	2.49	2.48	2.49	2.47	2.33	2.15	2.37	1.62
1992	2.16	2.05	1.98	1.97	2.03	2.00	2.10	2.16	2.14	2.09	2.22	2.25	2.07	1.72
1993	2.21	2.28	2.45	2.67	2.70	2.79	2.74	2.65	2.60	2.61	2.29	2.16	2.50	1.72
1994	2.19	2.06	1.99	2.13	2.19	2.23	2.30	2.36	2.42	2.51	2.63	2.63	2.26	1.89
1995	2.69	2.95												
							$/cwt.							
Sorghum:														
1973	3.87	3.65	3.66	3.83	4.03	4.38	4.25	3.78	3.59	3.59	4.15	5.07	3.82	1.79
1974	5.30	5.78	5.85	5.33	4.96	4.21	4.03	4.15	4.21	4.15	4.25	4.69	4.95	1.88
1975	4.56	4.43	4.05	4.00	4.06	4.09	4.14	4.14	4.14	4.29	4.53	4.03	4.23	1.88
1976	4.20	3.68	3.30	3.51	3.59	3.51	3.55	3.44	3.20	3.12	2.84	2.63	3.62	2.55
1977	2.52	2.80	3.03	3.05	3.15	3.20	3.39	3.62	3.66	3.64	3.50	3.37	3.25	3.39
1978	3.22	3.35	3.45	3.58	3.54	3.55	3.54	3.58	3.66	4.30	4.46	4.27	3.59	3.39
1979	4.24	3.90	3.99	3.90	4.05	3.98	4.05	3.96	4.04	4.49	4.95	5.12	4.19	3.57
1980	5.12	5.36	5.48	5.49	5.48	5.33	5.17	5.25	5.16	5.03	4.84	4.55	5.19	3.82
1981	4.07	3.90	3.87	3.95	4.09	4.08	4.00	4.10	4.35	4.17	3.96	3.95	4.01	4.07
1982	3.80	3.70	3.78	3.97	4.09	4.42	4.67	4.92	5.05	5.05	5.03	5.29	4.41	4.32
1983	5.26	5.01	4.98	4.93	4.92	4.74	4.85	5.00	5.08	4.94	4.64	4.58	4.89	4.50
1984	4.24	4.05	4.05	4.15	4.16	4.10	4.24	4.46	4.54	4.52	4.04	3.74	4.15	4.32
1985	3.27	3.30	3.47	3.76	3.69	3.55	3.67	3.80	3.99	3.43	3.06	2.66	3.45	4.32
1986	2.36	2.34	2.39	2.41	2.37	2.36	2.44	2.58	2.69	2.79	2.66	2.52	2.45	3.25
1987	2.43	2.48	2.69	2.72	2.75	2.88	2.92	2.94	2.90	4.13	4.56	4.41	3.04	3.11
1988	4.26	4.16	3.99	4.07	4.09	4.05	4.04	4.21	4.03	3.90	4.00	3.81	4.05	3.00
1989	3.80	3.61	3.68	3.54	3.58	3.53	3.69	3.89	4.07	4.29	4.44	4.14	3.75	2.80
1990	3.96	3.55	3.57	3.67	3.72	3.88	3.93	4.05	4.11	3.89	3.95	4.01	3.79	2.66
1991	4.10	3.93	3.94	3.99	4.07	4.19	4.31	4.28	4.31	4.22	3.82	3.77	4.02	2.75
1992	3.71	3.23	3.21	3.27	3.38	3.32	3.38	3.38	3.34	3.40	3.71	3.78	3.38	2.91
1993	3.69	3.81	4.22	4.54	4.70	4.59	4.36	4.20	4.20	4.24	3.71	3.73	4.13	2.91
1994	3.56	3.37	3.39	3.53	3.64	3.69	3.76	3.84	4.06	4.71	4.78	4.65	3.80	3.21
1995	4.87	5.18												

Year	June	July	Aug.	Sept.	Oct. 2/	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average 3/	Loan rate
							$/bu.							
Oats:														
1973	0.90	0.86	1.13	1.09	1.14	1.13	1.20	1.32	1.44	1.40	1.24	1.27	1.18	0.54
1974	1.30	1.37	1.55	1.57	1.68	1.70	1.70	1.62	1.58	1.46	1.51	1.54	1.53	0.54
1975	1.49	1.45	1.44	1.45	1.41	1.40	1.42	1.44	1.46	1.46	1.44	1.47	1.46	0.54
1976	1.64	1.64	1.48	1.49	1.46	1.45	1.51	1.58	1.63	1.64	1.64	1.52	1.56	0.72
1977	1.29	1.02	0.93	0.94	1.04	1.10	1.13	1.18	1.22	1.17	1.19	1.24	1.09	1.03
1978	1.16	1.08	1.06	1.06	1.08	1.15	1.19	1.22	1.25	1.27	1.29	1.29	1.20	1.03
1979	1.35	1.33	1.24	1.29	1.31	1.41	1.31	1.39	1.37	1.34	1.38	1.43	1.33	1.08
1980	1.48	1.50	1.53	1.63	1.65	1.84	1.92	1.98	2.01	2.08	2.05	2.05	1.72	1.16
1981	1.99	1.84	1.72	1.74	1.78	1.88	1.94	1.97	1.99	2.02	1.99	1.99	1.88	1.24
1982	1.88	1.57	1.39	1.35	1.32	1.40	1.44	1.46	1.48	1.49	1.54	1.54	1.49	1.31
1983	1.51	1.46	1.45	1.55	1.62	1.67	1.73	1.81	1.88	1.81	1.82	1.84	1.62	1.36
1984	1.80	1.68	1.62	1.60	1.69	1.64	1.72	1.74	1.69	1.68	1.68	1.60	1.67	1.31
1985	1.59	1.31	1.16	1.10	1.08	1.17	1.20	1.18	1.16	1.14	1.13	1.21	1.23	1.31
1986	1.10	0.90	0.86	0.99	1.10	1.32	1.44	1.46	1.47	1.45	1.50	1.57	1.21	0.99
1987	1.52	1.29	1.40	1.49	1.60	1.62	1.76	1.79	1.84	1.78	1.82	1.84	1.56	0.94
1988	2.63	2.86	2.54	2.57	2.56	2.41	2.47	2.52	2.46	2.41	2.24	2.13	2.61	0.90
1989	1.82	1.53	1.47	1.38	1.47	1.48	1.53	1.47	1.43	1.39	1.44	1.45	1.49	0.85
1990	1.33	1.15	1.06	1.09	1.14	1.16	1.17	1.13	1.13	1.16	1.16	1.16	1.14	0.81
1991	1.08	1.08	1.09	1.12	1.21	1.25	1.25	1.31	1.44	1.44	1.46	1.43	1.21	0.83
1992	1.38	1.32	1.23	1.28	1.31	1.35	1.36	1.42	1.42	1.43	1.45	1.51	1.32	0.88
1993	1.43	1.36	1.32	1.31	1.33	1.39	1.42	1.42	1.42	1.39	1.32	1.49	1.36	0.88
1994	1.31	1.20	1.16	1.18	1.21	1.18	1.18	1.22	1.22	1.33	1.36	1.39	1.22	0.97
1995	1.38	1.53	1.47	1.43	1.55									

See footnotes at end of table.

Continued--

Appendix table 13--Average prices received by farmers, United States, by month, and loan rate, 1973-95 1/--Continued

Year	June	July	Aug.	Sept.	Oct. 2/	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average 3/	Loan rate
							$/bu.							
All barley:														
1973	1.55	1.58	2.10	2.16	2.23	2.10	2.19	2.32	2.52	2.61	2.15	2.19	2.14	0.86
1974	2.25	2.35	2.78	2.86	3.11	3.41	3.30	3.17	2.89	2.55	2.72	2.75	2.81	0.90
1975	2.30	2.35	2.56	2.69	2.68	2.43	2.35	2.31	2.31	2.34	2.31	2.41	2.42	0.90
1976	2.60	2.51	2.35	2.33	2.22	2.11	2.08	2.19	2.19	2.25	2.22	2.12	2.25	1.22
1977	1.93	1.53	1.53	1.69	1.63	1.82	1.79	1.90	1.98	1.90	1.93	2.15	1.78	1.63
1978	2.04	1.83	1.86	1.85	1.90	1.93	1.90	1.95	1.87	1.89	1.96	2.07	1.92	1.63
1979	2.30	2.22	2.23	2.33	2.32	2.40	2.32	2.27	2.23	2.18	2.15	2.21	2.27	1.71
1980	2.36	2.52	2.59	2.65	2.81	2.90	2.97	3.09	3.05	3.04	3.04	3.00	2.79	1.83
1981	2.94	2.41	2.37	2.44	2.38	2.49	2.48	2.50	2.40	2.40	2.42	2.53	2.48	1.95
1982	2.39	2.16	2.20	2.17	1.98	2.06	2.19	2.16	2.00	2.09	2.22	2.36	2.18	2.08
1983	2.32	2.20	2.34	2.46	2.53	2.55	2.55	2.55	2.47	2.50	2.54	2.78	2.47	2.16
1984	2.61	2.54	2.26	2.25	2.29	2.25	2.19	2.24	2.21	2.18	2.16	2.22	2.29	2.08
1985	2.14	2.08	1.98	1.88	1.96	2.05	2.07	2.05	1.95	1.88	1.85	1.73	1.98	2.08
1986	1.57	1.67	1.51	1.45	1.58	1.69	1.62	1.60	1.63	1.69	1.69	1.76	1.61	1.56
1987	1.74	1.82	2.00	1.87	1.72	1.88	1.83	1.78	1.72	1.65	1.74	1.77	1.81	1.49
1988	2.45	2.97	2.96	2.94	2.86	2.96	2.73	2.74	2.67	2.74	2.73	2.64	2.80	1.44
1989	2.34	2.16	2.70	2.47	2.41	2.47	2.47	2.33	2.33	2.19	2.22	2.36	2.42	1.34
1990	2.29	2.16	2.13	2.13	2.04	2.16	2.13	2.14	2.13	2.15	2.10	2.05	2.14	1.28
1991	1.90	1.73	2.06	2.06	2.10	2.20	2.24	2.21	2.15	2.12	2.14	2.22	2.10	1.32
1992	2.09	2.26	2.16	1.84	1.92	2.05	1.95	2.07	2.00	2.00	2.09	1.97	2.04	1.40
1993	1.95	1.90	2.02	1.87	1.82	2.01	2.02	2.15	2.07	2.01	2.02	2.06	1.99	1.40
1994	1.91	1.92	2.07	1.93	1.93	2.09	1.99	2.05	2.13	2.13	2.15	2.20	2.03	1.54
1995	2.25	2.43	2.63	2.57	2.82									

Year	June	July	Aug.	Sept.	Oct. 2/	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
							$/bu.					
Feed barley:												
1979	2.38	2.22	2.21	2.29	2.20	2.18	2.23	2.14	2.24	2.16	2.09	2.21
1980	2.38	2.43	2.46	2.56	2.70	2.75	2.96	3.09	2.98	2.99	2.90	3.01
1981	2.98	2.36	2.23	2.32	2.30	2.29	2.29	2.41	2.28	2.29	2.35	2.58
1982	2.52	2.23	1.98	1.91	1.87	1.94	1.98	2.07	1.99	2.08	2.26	2.43
1983	2.52	2.31	2.23	2.41	2.45	2.51	2.52	2.58	2.47	2.54	2.55	2.86
1984	2.72	2.60	2.10	2.13	2.19	2.19	2.20	2.22	2.27	2.19	2.16	2.30
1985	2.26	2.05	1.75	1.74	1.85	1.90	2.03	2.00	1.90	1.83	1.85	1.81
1986	1.61	1.44	1.21	1.33	1.49	1.62	1.59	1.56	1.61	1.69	1.71	1.84
1987	1.79	1.67	1.54	1.57	1.66	1.68	1.63	1.65	1.64	1.59	1.73	1.76
1988	2.07	2.34	2.37	2.39	2.34	2.30	2.27	2.28	2.29	2.35	2.32	2.27
1989	2.18	1.96	2.06	1.98	1.97	2.09	2.10	2.02	2.01	1.99	2.08	2.28
1990	2.26	2.04	1.77	1.85	1.91	1.95	1.89	2.02	1.94	1.95	1.99	2.00
1991	1.91	1.63	1.63	1.84	1.90	1.96	2.02	1.96	1.99	1.99	2.00	2.19
1992	2.06	1.99	1.73	1.72	1.78	1.78	1.79	1.85	1.86	1.83	1.83	1.87
1993	1.97	1.78	1.64	1.58	1.66	1.79	1.90	1.97	1.94	1.85	1.86	1.99
1994	1.84	1.78	1.71	1.76	1.81	1.86	1.78	1.83	1.96	1.96	2.05	2.14
1995	2.19	2.29	2.30	2.37	2.64							
Malting barley:												
1979	2.18	2.22	2.24	2.40	2.44	2.53	2.39	2.30	2.23	2.20	2.19	2.21
1980	2.34	2.61	2.72	2.81	2.97	3.04	2.99	3.08	3.11	3.10	3.14	2.99
1981	2.86	2.48	2.58	2.66	2.49	2.68	2.63	2.70	2.55	2.50	2.48	2.42
1982	2.26	2.10	2.38	2.58	2.22	2.26	2.39	2.32	2.00	2.09	2.13	2.18
1983	2.05	2.06	2.50	2.69	2.72	2.61	2.61	2.50	2.47	2.46	2.54	2.53
1984	2.52	2.48	2.50	2.52	2.52	2.39	2.18	2.29	2.11	2.17	2.17	2.10
1985	2.02	2.13	2.49	2.33	2.24	2.32	2.19	2.13	1.99	1.93	1.85	1.66
1986	1.52	2.07	2.23	1.85	1.83	1.78	1.65	1.70	1.69	1.69	1.65	1.66
1987	1.68	2.04	2.55	2.39	1.88	2.07	2.01	2.15	1.80	1.69	1.75	1.81
1988	2.80	3.26	3.38	3.47	3.41	3.34	3.27	3.32	3.22	3.22	3.16	3.04
1989	2.62	2.68	3.04	2.87	2.89	2.90	2.88	2.73	2.61	2.45	2.51	2.53
1990	2.35	2.37	2.47	2.42	2.29	2.34	2.44	2.24	2.33	2.40	2.26	2.10
1991	1.88	2.02	2.80	2.65	2.66	2.54	2.45	2.53	2.47	2.31	2.40	2.27
1992	2.15	2.51	2.60	2.11	2.14	2.23	2.11	2.28	2.13	2.17	2.32	2.14
1993	1.92	2.06	2.58	2.41	2.29	2.53	2.32	2.50	2.50	2.31	2.40	2.25
1994	2.08	2.19	2.37	2.17	2.14	2.31	2.21	2.30	2.30	2.35	2.31	2.32
1995	2.48	2.65	2.81	2.81	3.08							

1/ Prices do not include an allowance for loans outstanding and government purchases. 2/ October 1995 data are preliminary. 3/ U.S. season-average prices based on monthly prices weighted by monthly marketings.

Source: Agricultural Prices, Agricultural Statistics Board, USDA.

Appendix table 14--Cash prices at principal markets, 1973-95

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
							$/bu.						
Corn, no. 2 yellow; Gulf Ports (Barge delivered to Louisiana Gulf):													
1973	2.72	2.70	2.74	2.87	3.11	3.33	3.21	2.90	2.89	2.96	3.36	3.70	3.04
1974	3.59	3.86	3.68	3.69	3.34	3.06	3.05	3.03	2.90	3.02	3.03	3.29	3.30
1975	3.11	2.98	2.80	2.77	2.80	2.88	2.87	2.82	3.00	3.09	3.08	2.95	2.93
1976	2.92	2.70	2.51	2.63	2.83	2.81	2.73	2.68	2.56	2.40	2.16	1.95	2.57
1977	1.99	2.11	2.37	2.44	2.42	2.57	2.64	2.83	2.86	2.70	2.45	2.34	2.48
1978	2.31	2.44	2.54	2.49	2.66	2.72	2.77	2.83	2.85	3.05	3.33	3.02	2.75
1979	3.00	3.03	2.96	2.94	2.68	2.89	2.80	2.74	2.81	2.89	3.33	3.64	2.98
1980	3.58	3.57	3.72	3.73	3.78	3.64	3.61	3.69	3.58	3.46	3.51	3.23	3.59
1981	2.93	2.84	2.83	2.74	2.92	2.87	2.92	3.00	3.00	2.94	2.82	2.58	2.87
1982	2.55	2.33	2.62	2.68	2.74	2.98	3.18	3.39	3.40	3.43	3.57	3.88	3.06
1983	3.75	3.76	3.74	3.64	3.60	3.48	3.74	3.76	3.71	3.73	3.62	3.52	3.67
1984	3.31	3.08	2.98	2.90	3.03	3.04	3.05	3.05	2.96	2.95	2.92	2.67	3.00
1985	2.59	2.50	2.69	2.75	2.72	2.63	2.56	2.57	2.68	2.63	2.12	1.85	2.52
1986	1.68	1.66	1.83	1.81	1.73	1.70	1.83	1.89	2.06	2.06	1.95	1.81	1.83
1987	1.86	1.99	2.08	2.11	2.20	2.23	2.29	2.28	2.29	3.05	3.22	3.02	2.39
1988	3.08	3.07	2.89	2.99	3.01	2.99	3.02	2.93	2.99	2.87	2.73	2.57	2.93
1989	2.60	2.40	2.75	2.75	2.69	2.70	2.72	3.01	3.08	3.05	2.92	2.79	2.79
1990	2.59	2.55	2.54	2.60	2.68	2.70	2.77	2.80	2.69	2.65	2.67	2.79	2.67
1991	2.76	2.76	2.72	2.71	2.70	2.89	2.96	2.77	2.77	2.80	2.61	2.48	2.74
1992	2.50	2.40	2.42	2.39	2.39	2.40	2.48	2.55	2.50	2.36	2.59	2.55	2.46
1993	2.57	2.68	2.94	3.08	3.22	3.14	3.05	2.88	2.81	2.85	2.51	2.44	2.85
1994	2.48	2.44	2.43	2.61	2.72	2.72	2.79	2.79	2.84	3.04	3.23	3.21	2.78
1995	3.32												
Corn, no. 2 yellow, St. Louis:													
1973	2.29	2.28	2.40	2.63	2.84	3.03	2.91	2.64	2.63	2.82	3.29	3.52	2.77
1974	3.49	3.60	3.45	3.44	3.16	2.93	2.87	2.89	2.76	2.86	2.90	3.10	3.12
1975	2.90	2.62	2.53	2.56	2.60	2.66	2.69	2.66	2.81	2.90	2.91	2.78	2.72
1976	2.69	2.41	2.27	2.44	2.51	2.48	2.48	2.46	2.37	2.22	1.99	1.72	2.34
1977	1.66	1.75	2.14	2.23	2.30	2.24	2.38	2.46	2.49	2.45	2.27	2.12	2.21
1978	2.05	2.13	2.25	2.30	2.33	2.41	2.47	2.53	2.60	2.77	2.95	2.73	2.46
1979	2.68	2.59	2.51	2.66	2.50	2.64	2.54	2.53	2.60	2.66	3.01	3.31	2.69
1980	3.26	3.35	3.53	3.59	3.60	3.47	3.42	3.49	3.42	3.33	3.34	3.03	3.40
1981	2.61	2.53	2.59	2.54	2.65	2.61	2.66	2.78	2.78	2.75	2.68	2.42	2.63
1982	2.32	2.12	2.43	2.49	2.52	2.79	2.99	3.24	3.24	3.27	3.39	3.68	2.87
1983	3.60	3.50	3.53	3.45	3.41	3.31	3.55	3.61	3.58	3.57	3.43	3.33	3.49
1984	3.09	2.84	2.77	2.75	2.86	2.84	2.86	2.88	2.81	2.79	2.72	2.47	2.81
1985	2.38	2.27	2.50	2.59	2.55	2.50	2.42	2.46	2.56	2.52	2.01	1.67	2.37
1986	1.47	1.46	1.68	1.69	1.61	1.57	1.65	1.74	1.93	1.92	1.79	1.65	1.68
1987	1.65	1.78	1.91	1.97	2.05	2.07	2.09	2.10	2.13	2.77	2.96	2.81	2.19
1988	2.82	2.82	2.70	2.76	2.81	2.79	2.82	2.76	2.83	2.58	2.57	2.38	2.72
1989	2.38	2.39	2.48	2.44	2.45	2.48	2.57	2.77	2.86	2.85	2.75	2.59	2.58
1990	2.37	2.32	2.65	2.41	2.46	2.50	2.58	2.61	2.52	2.47	2.45	2.54	2.49
1991	2.44	2.46	2.50	2.53	2.51	2.73	2.78	2.59	2.63	2.61	2.32	2.32	2.53
1992	2.23	2.01	2.16	2.20	2.20	2.23	2.28	2.36	2.33	2.23	2.38	2.37	2.25
1993	2.30	2.39	2.78	2.96	3.07	3.00	2.91	2.72	2.69	2.71	2.29	2.27	2.67
1994	2.19	2.09	2.19	2.37	2.42	2.46	2.53	2.59	2.64	2.82	2.93	2.86	2.51
1995	2.96												
Corn, no. 2 yellow, Omaha:													
1973	2.37	2.34	2.40	2.49	2.71	2.95	2.76	2.49	2.51	2.68	3.19	3.55	2.70
1974	3.46	3.63	3.46	3.36	3.07	2.79	2.75	2.85	2.81	2.84	2.92	3.12	3.09
1975	2.95	2.75	2.55	2.56	2.57	2.60	2.62	2.59	2.74	2.86	2.83	2.69	2.69
1976	2.59	2.36	2.17	2.30	2.38	2.38	2.35	2.29	2.21	2.10	1.90	1.66	2.22
1977	1.67	1.79	2.02	2.04	2.02	2.03	2.14	2.25	2.34	2.33	2.13	1.98	2.06
1978	1.95	2.05	2.04	2.09	2.12	2.13	2.17	2.26	2.40	2.59	2.68	2.45	2.24
1979	2.37	2.37	2.32	2.36	2.26	2.33	2.23	2.32	2.43	2.50	2.81	2.98	2.44
1980	3.01	3.16	3.34	3.30	3.29	3.18	3.17	3.24	3.24	3.19	3.15	2.79	3.17
1981	2.51	2.44	2.39	2.37	2.47	2.45	2.48	2.61	2.65	2.65	2.54	2.23	2.48
1982	2.23	2.12	2.35	2.37	2.42	2.62	2.82	3.09	3.10	3.11	3.18	3.39	2.73
1983	3.32	3.23	3.24	3.17	3.11	3.03	3.25	3.33	3.35	3.37	3.22	3.11	3.23
1984	2.94	2.71	2.61	2.55	2.60	2.61	2.68	2.73	2.68	2.70	2.61	2.39	2.65
1985	2.35	2.26	2.28	2.36	2.33	2.31	2.31	2.34	2.43	2.42	2.01	1.61	2.25
1986	1.41	1.40	1.55	1.54	1.44	1.39	1.47	1.57	1.76	1.77	1.59	1.47	1.53
1987	1.51	1.57	1.68	1.75	1.79	1.84	1.86	1.87	1.96	2.64	2.72	2.55	1.98
1988	2.57	2.61	2.47	2.54	2.57	2.54	2.58	2.38	2.56	2.48	2.36	2.22	2.49
1989	2.22	2.26	2.28	2.28	2.25	2.25	2.36	2.56	2.66	2.68	2.61	2.46	2.41
1990	2.21	2.12	2.14	2.22	2.24	2.28	2.38	2.46	2.39	2.33	2.29	2.34	2.28
1991	2.34	2.30	2.29	2.32	2.37	2.44	2.52	2.43	2.46	2.48	2.27	2.10	2.36
1992	2.10	1.99	1.99	1.98	2.01	2.00	2.12	2.18	2.17	2.07	2.29	2.30	2.10
1993	2.25	2.36	2.66	2.82	2.86	2.84	2.72	2.58	2.62	2.64	2.23	2.19	2.56
1994	2.11	1.97	1.98	2.13	2.14	2.19	2.32	2.46	2.50	2.66	2.79	2.71	2.33
1995	2.81												

See footnotes at end of table.

Continued--

Appendix table 14--Cash prices at principal markets, 1973-95--Continued

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
						$/bu.							
Corn, no. 2 yellow, Chicago:													
1973	2.47	2.37	2.50	2.68	2.90	3.13	2.99	2.69	2.70	2.93	3.35	3.63	2.86
1974	3.55	3.74	3.48	3.47	3.19	2.96	2.90	2.96	2.82	2.89	2.95	3.12	3.17
1975	2.99	2.74	2.58	2.59	2.62	2.70	2.68	2.68	2.84	2.96	2.96	2.84	2.77
1976	2.77	2.49	2.33	2.44	2.53	2.54	2.52	2.50	2.41	2.27	2.05	1.78	2.39
1977	1.80	1.84	2.14	2.19	2.19	2.21	2.36	2.51	2.57	2.51	2.28	2.17	2.23
1978	2.13	2.22	2.28	2.27	2.29	2.35	2.42	2.53	2.66	2.83	3.00	2.83	2.48
1979	2.78	2.73	2.59	2.69	2.54	2.65	2.60	2.61	2.70	2.70	3.08	3.36	2.75
1980	3.44	3.43	3.43	3.54	3.56	3.49	3.48	3.53	3.47	3.41	3.41	3.09	3.44
1981	2.72	2.61	2.60	2.52	2.63	2.63	2.67	2.69	2.73	2.72	2.61	2.36	2.62
1982	2.17	2.07	2.38	2.44	2.54	2.74	2.98	3.12	3.11	3.28	3.33	3.60	2.81
1983	3.52	3.47	3.51	3.38	3.30	3.29	3.52	3.61	3.61	3.62	3.45	3.23	3.46
1984	2.95	2.81	2.79	2.72	2.79	2.79	2.84	2.90	2.85	2.83	2.76	2.50	2.79
1985	2.31	2.26	2.46	2.50	2.51	2.49	2.45	2.46	2.55	2.52	1.98	1.68	2.35
1986	1.49	1.51	1.68	1.66	1.57	1.50	1.60	1.69	1.89	1.88	1.68	1.53	1.64
1987	1.62	1.73	1.86	1.89	1.95	2.01	2.03	2.03	2.09	2.74	2.93	2.79	2.14
1988	2.79	2.81	2.65	2.69	2.74	2.72	2.78	2.72	2.77	2.66	2.50	2.30	2.68
1989	2.32	2.36	2.37	2.39	2.36	2.41	2.50	2.72	2.83	2.84	2.73	2.63	2.54
1990	2.33	2.27	2.27	2.33	2.39	2.44	2.52	2.59	2.42	2.43	2.40	2.52	2.41
1991	2.48	2.50	2.46	2.50	2.59	2.67	2.72	2.58	2.60	2.59	2.37	2.23	2.52
1992	2.17	2.06	2.13	2.17	2.18	2.14	2.23	2.32	2.29	2.20	2.38	2.37	2.22
1993	2.34	2.43	2.77	2.96	3.02	2.99	2.89	2.78	2.75	2.71	2.32	2.24	2.68
1994	2.17	2.06	2.11	2.24	2.32	2.37	2.45	2.50	2.58	2.73	2.87	2.80	2.43
1995	2.89												
						$/cwt.							
Grain sorghum no. 2 yellow, Gulf Ports (Rail delivered to Texas Gulf):													
1973	4.78	4.96	4.84	4.96	5.25	5.50	5.15	4.68	4.35	4.25	5.26	5.80	4.98
1974	5.84	6.77	6.63	6.35	5.39	4.95	5.04	5.06	5.02	4.80	4.69	5.55	5.51
1975	5.36	5.24	4.94	4.91	4.92	4.99	5.01	4.89	4.89	4.97	5.13	4.60	4.99
1976	4.80	4.45	4.24	4.37	4.52	4.52	4.43	4.25	4.16	3.82	3.64	3.43	4.22
1977	3.49	3.68	4.08	4.08	4.00	4.08	4.34	4.59	4.62	4.40	4.11	3.98	4.12
1978	3.95	4.26	4.38	4.34	4.40	4.44	4.46	4.46	4.56	4.96	5.40	5.05	4.55
1979	5.11	5.27	5.28	5.36	5.10	5.39	5.20	5.19	5.29	5.42	6.03	6.49	5.43
1980	6.43	6.48	6.79	6.71	6.65	6.46	6.40	6.38	6.34	5.76	5.60	5.29	6.27
1981	5.00	4.91	5.10	5.08	5.27	5.14	5.11	5.21	5.30	5.01	4.66	4.54	5.03
1982	4.36	4.44	5.00	5.06	5.20	5.49	5.64	5.98	6.05	5.78	5.68	6.18	5.41
1983	6.15	5.99	6.01	5.94	5.87	5.70	5.93	5.88	5.98	5.84	5.05	4.86	5.77
1984	4.75	4.60	4.84	5.04	5.19	5.10	5.32	5.36	5.23	4.78	4.49	4.04	4.90
1985	3.70	3.97	4.34	4.52	4.45	4.30	4.28	4.50	4.80	3.90	3.37	2.71	4.07
1986	2.95	3.15	3.26	3.15	3.05	3.09	3.35	3.30	3.51	3.50	3.30	3.04	3.22
1987	3.13	3.35	3.55	3.50	3.65	3.80	3.86	3.70	3.73	5.00	5.33	4.93	3.96
1988	4.99	4.91	4.64	4.93	4.99	4.99	5.02	4.89	5.05	4.75	4.02	4.53	4.81
1989	4.67	4.61	4.69	4.70	4.62	4.59	4.70	4.97	5.04	4.87	4.95	4.73	4.76
1990	4.52	4.43	4.43	4.60	4.76	4.82	4.97	4.94	4.64	4.45	4.54	4.72	4.65
1991	4.81	4.86	4.79	4.90	5.08	5.30	5.39	5.00	4.89	4.72	4.27	4.26	4.86
1992	4.26	4.11	4.22	4.33	4.33	4.29	4.32	4.30	4.22	4.03	4.38	4.41	4.27
1993	4.40	4.55	5.15	5.43	5.52	5.41	5.22	4.89	4.88	4.77	4.28	4.29	4.90
1994	4.16	4.19	4.42	4.59	4.63	4.63	4.67	4.70	4.90	5.13	5.41	5.38	4.73
1995	5.78												
Sorghum, no. 2 yellow, Kansas City:													
1973	4.37	4.37	4.31	4.37	4.71	4.99	4.64	4.03	3.84	3.99	5.02	5.79	4.53
1974	5.64	6.32	6.10	5.70	4.95	4.55	4.48	4.64	4.60	4.53	4.82	5.13	5.12
1975	4.66	4.53	4.36	4.33	4.36	4.47	4.62	4.47	4.47	4.66	4.73	4.29	4.50
1976	4.27	3.88	3.60	3.77	3.91	3.85	3.75	3.62	3.53	3.28	3.15	2.73	3.61
1977	2.78	3.05	3.40	3.36	3.37	3.49	3.78	3.92	3.92	3.82	3.54	3.41	3.49
1978	3.43	3.61	3.67	3.64	3.71	3.73	3.77	3.81	3.92	4.41	4.89	4.44	3.92
1979	4.34	4.42	4.41	4.57	4.21	4.35	4.20	4.15	4.31	4.49	5.36	5.71	4.54
1980	5.61	5.65	5.91	5.82	5.79	5.52	5.46	5.49	5.38	5.23	5.29	4.58	5.48
1981	4.16	4.14	4.14	4.27	4.44	4.26	4.28	4.45	4.48	4.50	4.38	4.02	4.29
1982	4.06	3.85	4.25	4.37	4.37	4.54	5.08	5.30	5.37	5.37	5.32	5.69	4.80
1983	5.55	5.37	5.25	5.16	5.09	5.03	5.40	5.36	5.39	5.40	4.95	4.74	5.22
1984	4.46	4.25	4.28	4.32	4.48	4.33	4.58	4.76	4.74	4.74	4.50	4.06	4.46
1985	3.56	3.62	3.75	3.97	3.95	3.80	3.82	4.00	4.25	4.00	3.20	2.71	3.72
1986	2.47	2.60	2.70	2.62	2.50	2.57	2.80	2.85	3.10	3.20	2.80	2.55	2.73
1987	2.64	2.75	2.90	2.95	3.05	3.24	3.27	3.16	3.21	4.58	4.79	4.28	3.40
1988	4.27	4.17	4.00	4.23	4.24	4.26	4.32	4.17	4.29	4.15	3.96	3.92	4.17
1989	4.73	3.91	4.00	3.98	3.91	3.84	4.01	4.32	4.47	4.54	4.48	4.27	4.21
1990	3.89	3.79	3.85	3.97	4.12	4.21	4.35	4.34	4.13	4.02	4.05	4.22	4.08
1991	4.24	4.30	4.27	4.35	4.44	4.62	4.78	4.41	4.54	4.51	4.05	3.77	4.36
1992	3.76	3.60	3.61	3.70	3.70	3.66	3.70	3.72	3.82	3.58	3.99	4.01	3.74
1993	3.89	4.03	4.60	4.91	4.93	4.81	4.64	4.33	4.38	4.43	3.79	3.73	4.37
1994	3.72	3.55	3.60	3.81	3.92	3.90	4.01	4.08	4.27	4.50	4.93	4.85	4.10
1995	5.08												

See footnotes at end of table.

Continued--

Appendix table 14--Cash prices at principal markets, 1973-95--Continued

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
						$/cwt.							
Sorghum, no. 2 yellow, Texas High Plains:													
1973	4.50	4.44	4.40	4.43	4.75	5.22	4.89	4.42	4.22	4.08	4.91	5.80	4.67
1974	5.74	6.26	6.12	5.82	5.00	4.52	4.41	4.70	4.64	4.63	4.67	5.23	5.14
1975	5.03	4.56	4.32	4.32	4.29	4.38	4.47	4.48	4.49	4.63	5.01	4.40	4.53
1976	4.33	3.97	3.73	3.79	3.86	3.86	3.86	3.77	3.67	3.50	3.46	3.10	3.74
1977	3.13	3.38	3.58	3.63	3.62	3.67	4.04	4.28	4.25	4.27	4.12	3.93	3.82
1978	3.85	4.06	4.13	4.08	4.04	4.05	4.01	4.06	4.21	4.83	5.39	4.97	4.31
1979	4.92	4.83	4.76	4.75	4.49	4.56	4.46	4.48	4.78	4.99	5.71	5.89	4.88
1980	5.95	6.27	6.62	6.42	6.26	5.93	5.79	5.88	5.90	5.83	5.80	5.02	5.97
1981	4.65	4.70	4.71	4.63	4.77	4.78	4.75	4.91	5.26	5.28	5.24	4.80	4.87
1982	4.39	4.08	4.38	4.65	4.82	5.19	5.52	5.94	5.76	5.81	5.86	5.85	5.19
1983	5.77	5.56	5.49	5.43	5.35	5.14	5.33	5.68	5.67	5.77	5.72	5.46	5.53
1984	5.22	4.95	4.86	4.90	4.84	4.86	4.98	5.14	5.22	5.25	5.24	NQ	5.04
1985	4.19	4.38	4.30	4.49	4.47	4.36	4.33	4.48	4.77	4.84	3.93	3.36	4.32
1986	3.35	3.24	2.97	3.06	2.94	2.89	3.06	3.32	3.56	3.60	3.58	3.30	3.24
1987	3.19	3.27	3.27	3.39	3.40	3.53	3.56	3.54	3.55	4.84	5.25	4.96	3.81
1988	4.98	4.95	4.62	4.63	4.75	4.69	4.72	4.63	4.50	4.59	4.46	4.44	4.66
1989	4.39	4.13	4.06	4.03	4.04	4.02	4.10	4.38	4.96	4.94	4.82	4.63	4.38
1990	4.27	4.17	4.28	4.49	4.49	4.57	4.69	4.66	4.66	4.48	4.39	4.57	4.48
1991	4.52	4.56	4.57	4.61	4.76	4.92	5.04	4.93	5.01	5.03	4.85	4.54	4.78
1992	4.14	3.68	3.72	3.86	4.30	3.86	4.04	4.14	4.05	3.95	4.47	4.46	4.06
1993	4.43	4.64	5.18	5.51	5.52	5.35	5.12	4.80	4.90	4.98	4.46	4.46	4.95
1994	4.41	4.25	4.33	4.49	4.44	4.48	4.63	4.68	4.93	5.26	5.61	5.53	4.75
1995	5.84												

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average
							$/bu.						
Barley, no. 3 or better malting, 65% or better plump, Minneapolis:													
1973	1.74	1.82	2.45	2.64	2.64	2.62	2.64	2.76	3.27	3.57	2.98	2.94	2.67
1974	3.11	3.38	3.77	4.00	4.42	4.78	4.65	4.62	4.45	4.15	4.34	4.28	4.16
1975	3.97	3.83	3.65	3.93	3.83	3.56	3.35	3.24	3.21	3.22	3.17	3.22	3.52
1976	3.55	3.59	3.37	3.24	3.21	3.00	2.95	3.00	2.91	2.98	2.91	2.83	3.13
1977	2.38	2.02	1.92	2.15	2.25	2.36	2.32	2.26	2.33	2.32	2.44	2.51	2.27
1978	2.39	2.13	2.19	2.27	2.26	2.47	2.40	2.30	2.33	2.46	2.59	2.73	2.38
1979	2.80	2.82	2.67	3.10	3.18	3.06	2.93	2.87	2.81	2.69	2.73	2.82	2.87
1980	2.99	3.36	3.27	3.63	3.80	3.88	3.77	3.75	3.83	3.71	3.84	3.80	3.64
1981	3.34	2.95	3.15	3.05	3.02	3.07	2.92	3.00	3.14	2.99	2.98	3.05	3.06
1982	2.93	2.63	2.48	2.37	2.42	2.45	2.37	2.38	2.42	2.45	2.68	2.76	2.53
1983	2.60	2.54	2.76	2.90	2.96	2.95	2.77	2.85	2.76	2.91	3.04	3.06	2.84
1984	3.04	2.86	2.48	2.44	2.43	2.43	2.36	2.46	2.47	2.51	2.52	2.55	2.55
1985	2.46	2.25	2.03	2.15	2.10	2.27	2.29	2.28	2.20	2.34	2.40	2.07	2.24
1986	1.84	1.75	1.61	1.76	1.93	2.02	1.88	1.81	1.92	2.01	2.05	2.12	1.89
1987	2.07	1.93	1.73	1.98	2.08	2.05	2.01	2.02	2.15	2.08	2.11	2.24	2.04
1988	3.61	3.87	4.25	4.40	4.39	4.14	3.82	4.14	4.19	4.33	4.29	3.84	4.11
1989	3.02	3.33	3.57	3.43	3.48	3.18	3.19	3.20	3.02	3.83	2.97	3.17	3.28
1990	2.92	2.35	2.35	2.32	2.30	2.40	2.31	2.33	2.38	2.46	2.48	2.41	2.42
1991	2.26	2.14	2.14	2.21	2.38	2.50	2.54	2.51	2.51	2.50	2.50	NQ	2.38
1992	2.58	2.59	2.19	2.30	2.39	2.35	2.36	2.36	2.32	2.33	2.34	2.34	2.37
1993	2.30	2.27	2.27	2.18	2.26	2.48	2.57	2.55	2.63	2.65	2.73	2.84	2.48
1994	2.86	2.57	2.46	2.57	2.81	2.90	2.81	2.81	2.82	2.85	NQ	NQ	2.75
1995	3.15	3.69	3.22	3.58									
Barley, no. 2 or better feed, Duluth: 1/, 2/													
1973	1.51	1.67	2.12	2.12	2.02	1.80	2.12	2.34	2.51	2.32	1.74	2.10	2.03
1974	2.36	2.36	2.69	2.48	3.07	3.17	2.89	2.82	2.59	2.26	2.24	2.05	2.58
1975	1.67	2.04	2.77	3.00	2.83	2.42	2.23	2.11	2.26	2.38	2.39	2.50	2.38
1976	2.62	2.45	2.48	2.68	2.46	2.21	2.05	2.20	2.35	2.29	2.28	2.13	2.35
1977	1.76	1.63	1.50	1.58	1.66	1.65	1.65	1.65	1.65	1.66	1.91	1.90	1.68
1978	1.84	1.71	1.68	1.77	1.81	1.88	1.79	1.71	1.69	1.86	1.89	1.96	1.80
1979	2.16	2.39	2.15	2.22	2.34	2.11	2.15	2.09	2.04	2.06	2.12	2.09	2.16
1980	2.15	2.48	2.39	2.43	2.77	3.03	2.75	2.81	2.90	2.63	2.51	2.39	2.60
1981	2.09	2.26	2.35	2.21	2.26	2.31	2.06	2.20	2.27	2.16	2.16	2.24	2.21
1982	2.12	1.85	1.72	1.69	1.54	1.58	1.59	1.63	1.72	1.73	2.01	1.95	1.76
1983	1.96	1.95	2.42	2.61	2.60	2.53	2.39	2.55	2.56	2.65	2.74	2.77	2.48
1984	2.59	2.18	2.13	2.05	2.10	2.06	1.88	1.98	1.99	1.97	2.05	2.05	2.09
1985	1.90	1.66	1.46	1.40	1.41	1.49	1.60	1.57	NQ	NQ	NQ	1.31	1.53
1986	1.23	1.16	1.13	1.27	1.50	1.63	1.23	NQ	NQ	1.64	1.76	1.86	1.44
1987	1.73	1.59	1.60	1.76	1.78	1.82	1.74	1.72	1.77	1.88	1.94	1.98	1.78
1988	2.41	2.38	2.08	2.24	2.32	2.27	2.14	2.24	2.33	2.49	2.52	2.41	2.32
1989	2.12	2.11	2.17	2.13	2.16	2.15	2.23	2.28	2.20	2.27	2.27	2.33	2.20
1990	2.39	2.17	1.99	2.01	2.11	2.16	2.07	2.09	2.15	2.14	2.12	2.13	2.13
1991	2.02	1.89	1.92	2.08	2.18	2.23	2.18	2.20	2.28	2.30	2.35	2.38	2.17
1992	2.30	2.15	2.03	2.12	2.11	2.08	2.06	2.06	2.08	2.10	2.12	2.05	2.11
1993	1.99	1.96	1.89	1.89	2.01	2.16	2.14	2.15	2.16	2.07	2.08	2.11	2.05
1994	2.05	2.02	1.99	2.04	1.95	2.04	2.00	2.02	2.06	2.02	1.97	2.11	2.02
1995	2.22	2.25	2.09	2.06									

See footnotes at end of table.

Continued--

Appendix table 14--Cash prices at principal markets, 1973-95--Continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average
							$/bu.						
Barley, no. 2 Western, Portland:													
1973	2.01	2.31	2.58	2.61	2.63	2.70	2.63	2.85	2.93	2.93	2.36	2.39	2.58
1974	2.51	2.79	3.14	3.23	3.41	3.68	3.56	3.18	2.82	2.47	2.75	2.68	3.02
1975	2.47	2.04	2.77	3.01	2.82	2.46	2.38	2.45	2.56	2.56	2.44	2.50	2.54
1976	2.65	2.70	2.55	2.61	2.49	2.28	2.28	2.50	2.63	2.34	2.36	2.41	2.48
1977	2.19	2.10	1.96	2.00	1.97	2.04	2.13	2.19	2.20	2.24	2.39	2.41	2.15
1978	2.41	2.24	2.22	2.02	1.94	1.97	2.05	2.08	1.98	2.04	2.09	2.14	2.10
1979	2.47	2.89	2.76	2.75	2.69	2.57	2.67	2.68	2.79	2.67	2.63	2.71	2.69
1980	2.78	3.03	2.88	2.93	3.34	3.56	3.63	3.68	3.71	3.58	3.48	3.50	3.34
1981	3.21	2.83	2.76	2.73	2.67	2.73	2.73	2.97	2.94	2.91	2.99	3.01	2.87
1982	2.82	2.54	2.56	2.46	2.22	2.49	2.40	2.45	2.44	2.49	2.61	2.73	2.52
1983	2.60	2.48	2.70	2.91	2.98	3.02	3.00	3.13	2.90	2.91	3.13	3.17	2.91
1984	3.05	2.59	2.57	2.53	2.58	2.62	2.65	2.58	2.56	2.49	2.46	2.44	2.59
1985	2.37	2.26	2.13	2.06	2.17	2.31	2.47	2.37	2.16	2.15	2.17	2.16	2.23
1986	1.98	1.79	1.75	1.73	1.97	2.01	1.86	2.00	2.12	2.09	2.11	2.17	1.97
1987	2.04	1.96	2.04	2.04	2.11	2.13	2.16	2.15	2.14	2.10	2.07	2.14	2.09
1988	2.67	2.80	2.72	2.66	2.65	2.77	2.75	2.75	2.71	2.82	2.84	2.79	2.74
1989	2.59	2.59	2.53	2.40	2.45	2.64	2.75	2.75	2.62	2.63	2.67	2.71	2.61
1990	2.75	2.55	2.40	2.47	2.52	2.63	2.61	2.66	2.70	2.75	2.84	2.86	2.65
1991	2.76	2.53	2.44	2.52	2.63	2.70	2.74	2.69	2.73	2.73	2.76	2.66	2.66
1992	2.76	2.69	2.57	2.55	2.54	2.52	2.55	2.55	2.56	2.54	2.50	2.47	2.57
1993	2.44	2.33	2.33	2.13	2.18	2.36	2.54	2.57	2.51	2.46	2.48	2.41	2.40
1994	2.43	2.37	2.38	2.44	2.49	2.49	2.38	2.51	2.51	2.55	2.64	2.93	2.51
1995	3.05	3.05	2.83	2.96									
Oats, no. 2 Heavy White, Toledo:													
1973	1.01	1.04	1.23	1.27	1.31	1.32	1.49	1.63	1.75	1.67	1.48	1.46	1.39
1974	1.50	1.59	1.74	1.72	1.85	1.88	1.88	1.75	1.72	1.60	1.67	1.64	1.71
1975	1.61	1.52	1.47	1.41	1.35	1.48	1.49	1.53	1.58	1.56	1.52	1.54	1.50
1976	1.73	1.58	1.51	1.54	1.57	1.65	1.77	1.83	1.91	1.85	1.80	1.81	1.71
1977	1.61	1.33	1.19	1.15	1.17	1.40	1.53	1.53	1.50	1.43	1.47	1.51	1.40
1978	1.49	1.29	1.27	1.24	1.29	1.39	1.39	1.42	1.44	1.39	1.38	1.45	1.37
1979	1.59	1.60	1.47	1.44	1.45	1.56	1.64	1.64	1.64	1.65	1.70	1.80	1.60
1980	1.89	1.79	1.78	1.85	2.00	2.22	2.39	2.51	2.49	2.39	2.36	2.39	2.17
1981	2.40	2.03	1.98	1.97	2.14	2.31	2.25	2.32	2.37	2.35	2.31	2.33	2.23
1982	2.17	1.61	1.39	1.34	1.37	1.49	1.58	1.58	1.54	1.52	1.52	1.53	1.55
1983	1.56	1.54	1.77	1.98	2.12	2.21	2.24	2.25	2.07	2.12	2.16	2.08	2.01
1984	2.06	2.06	2.00	1.95	1.92	1.96	1.94	1.96	1.96	1.88	1.75	1.60	1.92
1985	1.54	1.33	1.04	0.96	0.91	1.01	1.09	1.08	1.10	1.08	0.95	0.92	1.08
1986	0.81	0.82	0.83	0.81	0.93	1.23	1.43	1.52	1.55	1.34	1.44	1.69	1.20
1987	1.56	1.24	1.55	1.62	1.62	1.77	1.83	1.83	1.87	1.77	1.73	1.73	1.68
1988	2.71	2.79	2.66	2.55	2.41	2.04	2.08	2.25	2.10	1.96	1.83	1.79	2.26
1989	1.53	1.39	1.30	1.30	1.34	1.37	1.46	1.40	1.37	1.41	1.46	1.47	1.40
1990	1.33	1.19	1.14	1.09	1.11	1.10	1.15	1.12	1.12	1.22	1.22	1.26	1.17
1991	1.14	1.24	1.29	1.28	1.31	1.30	1.34	1.41	1.58	1.61	1.48	1.50	1.37
1992	1.46	1.47	1.46	1.58	1.54	1.58	1.55	1.54	1.49	1.43	1.53	1.50	1.51
1993	1.42	1.50	1.49	1.43	1.41	1.38	1.37	1.43	1.40	1.37	1.37	1.25	1.40
1994	1.35	1.26	1.26	1.32	1.35	1.28	1.27	1.34	1.45	1.43	1.48	1.59	1.37
1995	1.65	1.76	1.83	1.90									
Oats, no. 2 Heavy White, Minneapolis:													
1973	0.93	0.93	1.28	1.32	1.26	1.25	1.32	1.55	1.66	1.52	1.26	1.35	1.30
1974	1.43	1.63	1.68	1.71	1.87	1.80	1.74	1.64	1.64	1.49	1.72	1.78	1.68
1975	1.59	1.59	1.70	1.68	1.64	1.69	1.65	1.67	1.66	1.64	1.67	1.72	1.66
1976	1.93	1.84	1.67	1.67	1.66	1.62	1.67	1.78	1.80	1.76	1.81	1.68	1.74
1977	1.38	1.15	1.02	1.11	1.17	1.34	1.32	1.32	1.32	1.33	1.40	1.43	1.27
1978	1.36	1.24	1.28	1.36	1.39	1.47	1.40	1.47	1.54	1.60	1.48	1.55	1.43
1979	1.68	1.60	1.47	1.55	1.65	1.67	1.59	1.52	1.50	1.48	1.52	1.62	1.57
1980	1.67	1.80	1.70	1.86	1.96	2.15	2.16	2.20	2.25	2.23	2.21	2.23	2.04
1981	2.18	2.02	1.99	2.02	2.09	2.28	2.10	2.23	2.26	2.16	2.21	2.16	2.14
1982	2.12	1.87	1.53	1.51	1.51	1.67	1.67	1.67	1.63	1.63	1.73	1.71	1.69
1983	1.67	1.60	1.79	1.94	2.00	1.97	1.94	1.98	1.82	1.88	1.89	1.96	1.87
1984	1.92	1.84	1.77	1.79	1.84	1.92	1.87	1.81	1.82	1.79	1.73	1.65	1.81
1985	1.59	1.44	1.23	1.24	1.19	1.32	1.39	1.37	1.30	1.27	1.16	1.22	1.31
1986	1.18	1.05	1.12	1.29	1.39	1.72	1.66	1.64	1.56	1.46	1.59	1.83	1.46
1987	1.64	1.61	1.77	1.85	1.97	2.05	2.02	2.10	2.06	1.93	1.94	2.12	1.92
1988	3.26	3.25	3.09	3.07	2.99	2.71	2.74	2.87	2.59	2.49	2.30	2.22	2.80
1989	1.97	1.72	1.59	1.58	1.61	1.68	1.70	1.56	1.48	1.57	1.63	1.68	1.65
1990	1.52	1.37	1.25	1.23	1.29	1.30	1.24	1.22	1.18	1.27	1.32	1.36	1.30
1991	1.25	1.33	1.38	1.35	1.41	1.42	1.49	1.50	1.68	1.66	1.57	1.59	1.47
1992	1.55	1.49	1.45	1.58	1.52	1.59	1.63	1.66	1.63	1.63	1.66	1.57	1.58
1993	1.54	1.63	1.63	1.66	1.56	1.51	1.56	1.57	1.52	1.55	1.46	1.37	1.55
1994	1.47	1.36	1.44	1.44	1.44	1.41	NQ	1.46	1.42	1.54	1.62	1.76	1.36
1995	1.73	1.92	1.96	2.04									

NQ = No quotes. 1/ Prior to June 1977 reported as barley, no. 3 or better. 2/ Reporting point changed from Minneapolis #2 feed to Duluth #2 feed beginning March 1987.

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

Appendix table 15--Feed-price ratios for livestock, poultry, and milk, by month, 1983-95

Year	Sept.	Oct. 1/	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Average 2/
Hog/corn, U.S. basis: 3/													
1983	13.30	12.80	11.80	14.00	15.40	14.60	14.30	14.30	14.10	14.60	15.80	16.20	14.27
1984	16.00	16.50	18.40	19.00	18.20	18.40	16.30	15.30	15.40	16.90	17.60	17.40	17.12
1985	17.30	20.40	19.50	19.80	19.00	18.40	17.60	17.30	19.20	22.70	29.50	35.90	21.38
1986	40.20	37.90	35.90	33.70	31.90	33.90	32.20	33.40	32.80	35.00	37.30	39.90	35.34
1987	36.40	31.50	25.20	23.40	24.30	25.00	22.70	22.30	23.90	19.50	16.20	16.90	23.94
1988	15.70	15.00	14.40	15.70	15.70	15.60	15.10	14.40	16.10	17.90	18.60	20.10	16.19
1989	19.00	21.00	20.10	21.20	20.50	20.80	21.60	21.40	23.40	22.90	23.20	23.30	21.53
1990	22.30	23.30	25.90	21.50	22.00	22.50	21.50	21.00	22.70	23.70	23.90	22.00	22.69
1991	19.90	18.90	16.60	16.60	15.30	16.30	15.70	16.50	18.10	18.90	19.10	20.50	17.70
1992	19.50	20.50	20.80	21.20	20.30	22.00	22.10	21.00	21.90	23.00	20.60	21.00	21.16
1993	21.60	20.60	17.30	15.20	16.10	17.20	16.20	16.10	16.40	16.40	18.40	19.40	17.58
1994	16.20	15.40	14.10	14.50	16.80	17.50	16.40	15.10	15.40	16.90	17.60	18.50	16.20
1995	18.00	15.80											
Steer & heifer-corn: 4/													
1983	NA	NA	NA	NA	20.30	20.80	20.50	19.50	18.80	18.30	18.90	19.60	NA
1984	20.80	28.50	29.70	24.60	23.90	24.00	22.70	22.10	21.80	21.40	20.50	21.30	23.44
1985	22.80	26.80	27.20	26.10	24.90	24.30	24.30	23.30	22.70	22.90	28.30	33.50	25.59
1986	40.40	42.00	40.70	39.50	40.30	43.90	42.70	43.80	40.60	39.80	40.90	44.80	41.62
1987	45.60	43.50	41.60	38.70	39.00	39.00	39.00	39.00	38.00	29.20	24.70	26.40	36.98
1988	27.60	28.10	29.10	28.90	29.20	29.20	29.70	29.40	28.70	28.50	29.00	32.60	29.17
1989	31.40	33.10	33.80	33.40	34.10	33.80	32.90	31.50	29.90	29.40	29.20	31.50	32.00
1990	34.00	36.60	37.60	36.60	36.00	35.00	34.50	33.90	33.40	33.20	32.90	30.60	34.53
1991	30.70	32.20	31.60	30.70	30.30	31.00	30.70	30.80	30.20	29.80	31.70	34.70	31.20
1992	35.00	37.30	38.20	38.70	38.80	39.80	38.80	37.80	37.80	37.10	33.80	33.40	37.21
1993	33.70	31.80	29.80	27.00	27.10	26.30	27.50	28.50	26.80	24.00	28.40	31.60	28.54
1994	30.20	32.10	34.40	31.90	32.60	32.40	30.50	28.40	26.40	25.20	23.20	23.50	29.23
1995	23.00	21.00											
Milk/feed, U.S. basis: 5/ 6/													
1983	NA	NA	NA	NA	2.43	2.42	2.34	2.26	2.20	2.24	2.37	2.54	NA
1984	2.74	2.92	3.08	2.98	2.92	2.90	2.79	2.68	2.52	2.60	2.64	2.82	2.80
1985	2.93	3.14	3.11	3.02	2.94	2.91	2.86	2.87	2.79	2.89	3.19	3.54	3.02
1986	4.03	4.24	4.26	4.14	4.15	4.07	3.84	3.56	3.16	3.28	3.44	3.62	3.82
1987	3.69	3.72	3.70	3.43	3.34	3.14	2.98	2.80	2.57	2.28	2.11	2.23	3.00
1988	2.40	2.50	2.59	2.59	2.51	2.45	2.30	2.26	2.25	2.38	2.52	2.83	2.47
1989	2.97	3.22	3.34	3.39	3.25	3.02	2.84	2.59	2.54	2.72	2.79	2.92	2.97
1990	2.93	2.82	2.83	2.59	2.57	2.52	2.42	2.34	2.41	2.54	2.73	2.82	2.63
1991	2.94	3.14	3.25	3.19	3.04	2.86	2.77	2.79	2.68	2.81	3.06	3.20	2.98
1992	3.22	3.29	3.23	3.13	2.96	2.87	2.77	2.79	2.81	2.91	2.78	2.70	2.96
1993	2.80	2.79	2.77	2.65	2.62	2.51	2.51	2.51	2.36	2.42	2.61	2.74	2.61
1994	2.81	2.92	2.96	2.83	2.73	2.69	2.67	2.56	2.53	2.47	2.44	2.52	2.68
1995	2.56	2.48											

See footnotes at end of table.

Continued--

Appendix table 15--Feed-price ratios for livestock, poultry, and milk, by month, 1983-95--Continued

Year	Sept.	Oct. 1/	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Average 2/
Market egg/feed, U.S. basis: 5/ 7/													
1983	NA	NA	NA	NA	12.40	12.20	9.20	11.30	7.90	6.90	7.20	7.50	NA
1984	8.00	7.90	9.40	8.90	7.20	7.50	8.40	7.40	7.00	7.80	7.90	9.40	8.07
1985	10.80	11.80	12.00	11.60	11.10	10.30	11.70	9.40	9.10	8.00	10.80	12.60	10.77
1986	14.00	13.30	15.40	14.60	13.10	13.00	11.70	11.20	9.00	9.00	9.40	10.00	11.98
1987	12.20	9.80	10.30	8.30	8.20	7.50	8.00	6.90	6.00	5.50	6.90	7.10	8.06
1988	8.30	7.70	8.00	8.20	8.30	8.20	11.10	9.00	8.40	8.80	9.20	11.60	8.90
1989	11.80	12.10	13.60	14.30	14.30	11.50	13.00	11.00	8.50	9.00	7.90	9.90	11.41
1990	10.90	12.10	12.40	12.30	13.20	11.10	12.60	10.00	8.60	8.80	10.40	9.80	11.02
1991	9.40	9.70	9.90	11.20	8.40	7.80	7.40	7.60	6.70	7.00	7.30	8.10	8.38
1992	9.60	9.30	11.20	11.10	10.50	10.30	11.70	10.60	9.20	9.80	8.20	8.90	10.03
1993	8.10	8.80	8.80	8.30	7.90	8.00	8.60	7.70	8.60	6.90	8.00	9.00	8.23
1994	9.20	8.90	10.30	10.20	9.70	9.60	9.20	9.20	7.80	7.80	8.00	8.70	9.05
1995	9.00	8.40											
Broiler/feed, U.S. basis: 5/ 8/													
1983	NA	NA	NA	NA	4.20	4.50	4.30	3.80	3.70	3.70	4.20	3.90	NA
1984	4.30	4.10	4.50	4.40	4.50	4.60	4.30	4.10	4.40	4.70	4.70	4.80	4.45
1985	5.20	5.10	5.50	5.10	5.10	4.80	4.90	4.90	5.20	5.90	4.60	8.30	5.38
1986	7.50	8.50	7.30	6.30	6.40	6.30	6.00	5.80	5.60	5.00	5.20	6.30	6.35
1987	5.50	4.90	4.90	4.30	4.60	4.30	4.40	4.40	4.90	4.50	4.70	4.90	4.69
1988	4.70	4.50	4.50	4.50	4.30	4.40	4.90	5.00	5.80	5.60	5.30	5.40	4.91
1989	5.70	4.90	4.70	4.40	4.70	5.30	5.60	4.90	5.10	5.00	5.30	4.80	5.03
1990	5.20	4.40	4.40	4.60	4.80	4.80	4.60	4.70	4.80	5.00	5.30	5.10	4.81
1991	5.00	5.00	4.80	4.70	4.70	4.60	4.60	4.50	4.90	4.70	5.40	5.70	4.88
1992	5.30	5.70	5.70	5.40	5.30	5.40	5.40	5.40	5.60	5.60	5.20	5.30	5.44
1993	5.50	5.30	5.00	4.60	4.50	4.50	4.70	4.80	5.10	5.10	5.60	5.70	5.03
1994	5.80	5.80	5.60	5.40	5.30	5.40	5.30	5.10	5.10	5.00	5.00	5.40	5.35
1995	5.50	4.90											
Turkey/feed, U.S. basis: 5/ 9/													
1983	NA	NA	NA	NA	6.00	5.50	5.30	5.40	5.20	5.30	5.90	6.40	NA
1984	7.00	8.00	8.90	9.60	7.90	6.50	6.20	6.10	6.20	6.60	7.40	8.50	9.28
1985	9.50	10.80	10.70	40.60	6.30	6.40	6.50	6.70	7.20	8.50	9.90	10.80	10.01
1986	11.70	12.60	11.80	9.70	7.90	8.20	8.00	7.90	7.30	7.00	7.10	7.10	7.34
1987	6.80	6.50	6.90	7.50	6.20	5.50	5.20	5.00	4.90	4.50	5.30	5.60	5.89
1988	6.20	6.70	6.70	5.30	4.80	5.30	5.50	5.90	6.10	6.30	6.10	6.60	6.09
1989	6.00	6.40	6.80	6.50	5.90	5.70	6.10	5.90	6.00	6.20	6.40	6.70	6.53
1990	7.00	7.60	7.70	6.70	6.00	6.30	6.40	6.50	6.70	6.90	7.20	7.10	6.57
1991	7.00	6.50	6.40	6.50	6.00	5.80	6.00	6.00	6.00	6.10	6.50	6.80	6.48
1992	6.70	7.10	7.20	7.10	6.30	6.40	6.60	6.50	6.60	6.70	6.40	6.40	6.47
1993	6.90	7.20	6.70	6.10	5.40	5.40	5.50	5.80	5.90	6.10	6.90	7.40	6.53
1994	7.40	7.90	8.00	7.30	6.70	6.40	6.50	6.40	6.30	6.30	6.00	6.30	6.73
1995	6.40	6.30											

1/ October 1995 data are preliminary. 2/ Simple average of monthly ratios for marketing year. 3/ Number of bushels of corn equal in value to 100 pounds of hog, live weight. 4/ Bushels of corn equal in value to 100 pounds of steers & heifers, live weight. 5/ Modifications in the calculation of feed price ratio are a result of Prices Paid program changes initiated in January 1995, using a different procedure. The new methodology utilizes major raw feed component prices from the NASS agricultural commodity prices published monthly. The major feed components of corn and soybeans account for 83 to 91 percent of the total ingredients in the rations. 6/ Number of pounds of 16% mixed dairy feed equal in value to one pound of whole milk. 7/ Number of pounds of laying feed equal in value to one dozen market eggs. 8/ Number of pounds of broiler grower feed equal in value to one pound of broiler, live weight. 9/ Number of pounds of turkey grower equal in value to one pound of turkey live weight. NA = Not available.

Starting with this new series, data are not comparable to previous publications due to the new methodology in the calculations of the feed price ratio.

Source: Agricultural Prices, Agricultural Statistics Board, USDA.

Appendix table 16--Byproduct feeds: Average wholesale price a ton, bulk, specified markets, by month, 1973 to date

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
							$/ton						
Distiller's dried grains, Lawrenceburg, Indiana:													
1973	154.10	119.20	117.50	126.25	129.70	123.90	106.25	94.00	90.50	92.75	98.00	120.00	114.35
1974	123.20	123.80	147.50	136.00	127.50	115.50	102.00	99.20	100.25	102.00	107.60	119.25	116.98
1975	125.50	121.75	110.40	97.60	107.75	114.50	107.60	102.50	101.50	110.20	123.00	126.40	112.39
1976	104.40	127.25	126.00	133.00	141.25	145.00	142.60	141.00	143.50	143.10	130.75	110.70	132.38
1977	113.60	112.25	117.10	123.00	124.60	124.00	123.75	123.00	124.00	125.60	124.50	118.60	121.17
1978	143.70	116.00	122.00	128.50	130.00	130.00	128.00	121.50	120.30	122.90	131.40	139.00	127.78
1979	160.00	153.00	147.50	145.00	143.60	134.70	124.00	121.10	122.60	126.00	132.00	144.50	137.83
1980	150.00	165.75	171.25	175.20	175.25	167.50	153.00	145.10	155.25	164.40	164.50	156.00	161.93
1981	150.00	151.25	153.75	148.00	146.25	147.60	139.40	136.50	142.00	147.00	153.00	145.25	146.67
1982	137.60	136.25	137.00	137.00	138.75	136.75	140.20	144.50	147.00	150.20	150.60	155.60	142.62
1983	167.50	175.00	183.20	189.75	190.00	185.00	173.50	165.50	168.00	165.75	156.60	147.75	172.30
1984	139.00	120.10	96.50	93.00	94.25	96.00	94.00	87.40	83.25	85.00	88.75	95.50	97.73
1985	96.50	99.70	105.25	110.80	115.00	113.75	109.50	112.40	111.90	109.75	102.10	NQ	107.88
1986	131.50	129.00	128.60	124.80	113.25	110.10	105.10	100.75	111.10	116.00	118.25	NQ	117.13
1987	118.00	118.25	122.50	128.40	138.75	139.75	136.00	129.00	126.50	131.80	159.00	NQ	131.63
1988	142.00	144.00	147.60	138.00	138.00	138.00	140.00	145.50	144.00	140.00	134.00	NQ	141.01
1989	141.75	140.00	131.00	121.00	122.00	120.25	115.25	117.25	119.60	120.75	119.00	NQ	124.35
1990	122.25	124.20	129.50	133.50	134.80	136.25	138.00	134.00	128.00	123.00	90.70	NQ	126.75
1991	118.00	118.00	122.00	126.60	128.00	127.60	124.10	121.00	117.25	117.20	126.00	NQ	122.34
1992	130.00	110.25	134.00	135.00	135.00	135.00	131.00	123.00	106.00	106.00	106.00	NQ	122.84
1993	120.00	121.25	127.00	130.00	130.00	130.00	127.00	122.00	118.40	116.00	120.00	NQ	123.79
1994	120.00	121.25	124.00	120.75	105.60	97.00	93.75	93.50	98.00	98.90	101.00	NA	106.70
1995	112.00												
Corn gluten feed, 21% protein, Illinois Points:													
1973	92.25	92.50	94.40	105.75	108.20	85.25	79.00	74.60	75.75	72.00	83.00	120.70	90.28
1974	91.00	100.00	103.75	92.80	90.25	80.50	77.00	88.40	80.00	81.60	83.90	91.50	88.39
1975	88.60	90.25	86.50	87.60	92.75	87.00	83.00	82.50	90.00	98.10	106.00	107.90	91.68
1976	114.00	115.10	108.00	117.50	125.25	122.00	110.60	114.80	117.50	108.80	89.00	80.40	110.25
1977	78.00	78.00	89.60	103.25	101.60	91.50	89.00	91.00	89.60	88.00	88.00	89.60	89.76
1978	96.25	107.60	113.50	115.40	118.60	122.00	121.60	120.50	117.90	122.50	131.00	130.00	118.07
1979	129.00	134.00	132.50	135.00	140.00	138.75	120.60	105.00	113.75	113.75	116.00	123.70	125.17
1980	130.00	126.25	131.25	138.00	140.00	120.00	114.50	121.25	122.40	111.00	101.75	107.25	121.97
1981	108.50	110.00	110.00	113.80	117.00	117.00	112.00	112.00	112.00	112.00	114.25	110.40	112.41
1982	115.00	109.50	111.20	120.00	125.00	117.50	112.80	110.00	111.75	114.00	120.00	127.00	116.15
1983	135.00	140.60	136.00	136.25	135.00	118.75	111.25	113.75	106.00	83.75	79.70	78.75	114.57
1984	69.40	76.00	80.10	80.60	79.80	73.90	61.60	59.70	63.25	68.50	74.10	78.00	72.08
1985	81.25	86.60	89.00	91.80	92.50	89.60	97.10	96.00	90.00	87.50	84.30	88.10	89.48
1986	97.80	105.50	109.75	99.20	97.90	98.10	99.60	98.40	96.90	93.80	91.25	92.40	98.38
1987	96.50	98.50	106.00	110.00	118.10	120.60	119.00	118.10	116.90	129.50	135.00	120.00	115.68
1988	119.40	119.40	123.10	125.00	127.10	120.90	118.90	120.40	112.50	108.00	107.00	106.10	117.32
1989	108.00	110.00	109.75	110.40	110.30	108.75	108.75	102.10	95.00	81.25	83.40	82.25	100.83
1990	83.50	92.60	94.25	98.40	114.20	103.75	114.25	101.70	95.98	94.25	92.00	90.50	97.95
1991	95.60	104.60	106.10	107.00	107.40	108.50	101.50	95.50	95.40	94.40	99.40	102.50	101.49
1992	107.30	108.50	106.10	115.20	108.10	107.00	89.00	80.50	81.60	82.70	81.90	83.50	95.95
1993	82.50	80.90	85.30	90.50	92.40	87.60	88.60	89.90	91.00	91.25	92.00	91.50	88.62
1994	90.40	89.25	86.85	84.30	82.20	81.00	82.10	77.40	78.50	79.90	81.90	79.40	82.77
1995	81.60												
Corn gluten meal, 60% protein, Illinois Points:													
1973	221.25	210.70	200.75	234.25	246.80	267.75	267.50	254.00	204.90	180.00	214.50	263.40	230.48
1974	217.75	221.60	217.50	204.00	198.50	181.25	191.50	209.60	211.00	212.00	215.20	222.00	208.49
1975	229.20	237.75	238.25	241.00	248.00	254.00	250.80	208.10	185.50	209.30	257.40	270.20	235.79
1976	294.00	298.00	267.80	246.00	258.00	288.75	297.80	287.50	296.00	294.40	275.90	208.20	276.03
1977	182.00	182.60	215.30	243.75	250.00	250.00	248.75	245.50	220.00	213.75	201.75	216.00	222.45
1978	232.75	249.20	243.75	243.75	252.60	271.90	280.00	270.00	234.00	241.75	304.10	325.00	262.40
1979	316.90	275.00	260.60	263.10	269.00	246.25	222.50	206.00	211.90	220.00	233.00	268.10	249.36
1980	302.00	288.75	296.25	302.00	307.50	292.50	239.00	235.00	256.25	261.00	237.50	249.40	272.26
1981	260.00	245.25	244.40	260.50	275.00	271.25	243.00	225.00	225.00	228.00	237.50	229.50	245.37
1982	221.25	207.50	215.00	246.25	265.00	267.50	251.00	238.75	235.00	213.00	242.50	300.00	241.90
1983	326.25	308.75	283.00	275.00	284.00	258.75	245.00	256.25	271.00	266.25	236.75	218.75	269.15
1984	213.80	211.30	215.60	240.00	232.00	215.60	203.75	191.00	172.50	169.20	174.50	198.10	203.11
1985	211.25	208.70	208.75	219.50	219.40	208.10	198.75	192.90	210.60	216.90	211.50	206.25	209.38
1986	208.00	222.50	230.60	241.50	232.20	206.25	208.50	213.10	226.40	267.80	268.75	240.60	230.52
1987	259.50	278.75	305.60	313.50	309.40	283.75	287.00	275.60	278.75	355.50	380.00	310.00	303.11
1988	309.40	313.75	293.00	277.50	281.00	288.10	280.60	275.60	272.00	270.63	271.25	257.00	282.49
1989	267.00	313.00	298.75	280.00	281.00	260.90	238.75	238.10	240.50	215.60	222.00	223.75	256.61
1990	229.40	232.00	231.90	240.60	247.00	239.40	247.50	236.70	226.90	230.00	236.20	254.60	237.68
1991	269.40	292.50	296.25	287.50	267.50	275.60	272.00	247.50	246.25	248.50	243.75	242.75	265.79
1992	266.00	269.40	266.90	287.00	283.10	294.40	295.50	284.40	276.90	276.50	300.60	314.50	284.60
1993	305.60	296.20	305.75	316.25	309.40	296.25	288.50	278.10	263.50	263.75	263.75	252.30	286.61
1994	235.60	226.90	232.50	239.40	230.50	221.25	215.60	206.25	196.50	208.10	218.75	232.00	221.95
1995	250.00												

See footnotes at end of table.

Continued--

Appendix table 16--Byproduct feeds: Average wholesale price a ton, bulk, specified markets, by month, 1973 to date--Continued

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
							$/ton						
Meat and bone meal, Kansas City: 1/													
1973	201.90	174.00	220.00	328.75	306.00	221.25	160.00	139.00	143.75	138.10	175.00	196.25	200.33
1974	135.00	183.00	153.10	155.40	152.50	137.50	137.50	151.00	149.40	156.90	162.00	168.10	153.45
1975	154.00	150.50	141.90	150.50	158.10	158.10	159.00	163.10	205.00	253.50	232.50	184.00	175.85
1976	203.75	183.75	210.50	240.00	261.25	237.50	259.00	288.75	270.00	222.00	168.75	169.50	226.23
1977	193.75	183.75	210.00	186.40	189.00	186.25	241.90	210.60	204.50	210.00	204.40	202.50	201.92
1978	218.75	233.50	228.60	230.00	229.50	266.90	264.40	253.10	239.50	265.00	254.50	219.40	241.93
1979	238.10	236.50	233.75	231.90	229.50	248.20	253.75	208.50	183.75	194.40	255.50	248.60	230.20
1980	275.50	288.60	300.60	264.50	258.75	237.50	231.50	245.00	246.25	235.00	247.50	240.10	255.90
1981	234.50	230.25	221.90	211.00	206.25	209.40	211.00	220.60	208.75	208.00	204.40	192.00	213.17
1982	186.25	183.75	209.30	210.60	225.00	232.50	231.00	246.90	213.10	199.50	198.75	244.50	215.10
1983	237.50	216.25	238.50	234.40	236.00	209.40	227.50	218.75	214.00	196.90	176.50	169.40	214.59
1984	162.80	178.00	177.50	175.60	175.70	173.10	146.25	126.40	108.10	120.00	130.40	140.60	151.20
1985	151.25	164.75	170.60	173.50	168.75	152.80	160.00	150.00	170.90	175.00	173.20	178.40	165.76
1986	187.10	183.10	189.40	198.50	175.25	173.10	178.60	191.90	216.90	222.00	222.40	209.75	195.67
1987	212.50	221.00	233.20	242.50	238.75	228.75	237.00	244.00	256.00	356.90	270.00	264.00	250.38
1988	278.75	280.60	271.10	258.80	275.40	261.10	266.00	254.40	229.30	258.10	266.60	217.80	259.83
1989	231.40	225.90	220.10	220.00	194.60	194.40	199.40	199.10	199.20	203.50	205.50	194.40	207.29
1990	200.50	209.20	211.25	209.40	198.50	191.25	205.60	205.00	194.40	195.75	205.10	224.40	204.20
1991	232.50	227.00	219.40	208.50	208.90	205.90	215.70	202.25	206.50	206.20	197.10	204.40	211.20
1992	217.20	216.60	208.60	214.50	225.00	214.25	215.80	221.90	208.90	208.50	268.40	231.50	220.93
1993	218.10	205.80	219.25	228.40	215.30	209.70	204.70	198.10	207.50	205.10	187.75	182.00	206.81
1994	188.75	184.60	172.70	163.10	176.25	181.00	180.75	160.60	159.60	161.60	159.80	157.40	170.51
1995	166.70												
Fish meal, 65% protein; domestic, East Coast:													
1973	462.50	420.00	411.25	587.50	538.00	446.25	405.00	337.00	276.25	258.75	252.00	312.50	392.25
1974	271.25	299.00	298.75	275.00	256.25	228.75	220.00	240.00	225.00	219.00	237.50	251.25	251.81
1975	257.00	268.75	270.00	267.00	271.90	272.00	279.00	270.00	282.50	352.50	383.75	332.50	292.24
1976	366.25	363.10	368.50	402.50	405.00	423.10	437.50	481.25	489.50	421.25	313.30	319.40	399.22
1977	335.00	342.50	353.00	363.75	365.00	362.50	377.50	395.00	373.00	356.25	316.90	333.50	356.16
1978	353.75	370.00	388.75	391.25	388.00	383.75	395.00	406.25	390.00	375.00	382.00	355.00	381.56
1979	353.75	366.00	370.00	381.25	391.50	403.75	398.75	375.00	355.00	342.50	365.00	380.00	373.54
1980	427.00	460.00	502.50	490.00	468.75	421.25	405.00	418.75	413.75	404.00	391.25	365.00	430.00
1981	378.00	383.75	370.00	354.00	370.00	377.50	377.00	360.00	360.00	335.00	306.25	315.50	357.25
1982	311.25	324.25	346.00	370.00	375.00	370.00	363.00	362.50	357.50	336.50	325.00	397.00	353.17
1983	415.00	425.00	423.50	407.50	392.60	373.75	383.75	381.25	360.00	354.00	329.00	298.75	378.68
1984	291.90	295.00	309.50	308.25	308.90	290.90	280.60	280.00	231.75	208.90	205.80	207.25	268.23
1985	240.50	284.50	259.00	297.50	291.00	287.50	320.00	290.00	286.90	272.50	278.00	303.10	284.21
1986	320.40	318.00	317.50	315.80	313.30	315.75	NQ	NQ	335.80	359.50	353.75	363.10	331.29
1987	364.30	372.50	401.25	449.50	448.75	420.80	NQ	426.25	456.25	553.50	571.00	527.50	453.78
1988	530.00	523.10	505.00	471.90	463.50	436.60	427.50	413.10	395.00	383.75	396.90	397.00	445.28
1989	382.50	381.00	384.40	386.25	388.50	389.40	387.50	320.60	341.00	313.75	309.50	316.25	358.39
1990	333.30	364.00	363.13	316.90	NQ	356.25	351.90	329.50	325.00	316.25	324.50	358.75	339.95
1991	385.00	403.50	406.90	321.50	394.40	390.60	NQ	348.00	364.20	365.80	345.00	300.70	365.96
1992	404.00	412.50	412.50	410.00	NQ	NQ	NQ	NQ	333.75	334.00	375.00	365.50	380.91
1993	344.40	326.90	342.50	361.25	350.00	350.00	344.00	326.25	330.00	327.50	318.30	321.50	505.33
1994	321.90	326.25	346.50	305.70	360.50	367.50	377.20	393.30	362.50	359.40	355.00	363.50	353.27
1995	375.00												
Dehydrated alfalfa meal, 17% protein (reground), Kansas City:													
1973	77.60	101.50	103.60	104.70	104.80	102.60	94.20	82.00	75.40	68.20	76.70	93.75	90.42
1974	89.75	92.00	89.25	87.00	84.25	77.10	74.40	75.90	77.00	74.70	76.60	81.50	81.62
1975	82.60	87.30	92.40	98.70	110.20	108.20	111.40	108.40	91.40	94.20	99.90	103.00	98.98
1976	115.20	115.50	111.10	112.10	112.80	111.30	104.25	95.30	91.40	85.00	74.90	66.40	99.60
1977	64.30	67.90	70.90	74.40	73.20	72.80	80.90	82.60	77.50	76.20	76.90	77.20	74.57
1978	81.20	92.90	98.90	99.20	100.60	103.50	105.10	104.60	102.30	99.50	102.80	98.80	99.12
1979	100.80	111.00	112.10	112.60	112.60	112.80	110.60	104.90	100.10	96.80	104.00	118.10	108.03
1980	120.10	122.70	132.00	136.20	135.50	131.90	125.60	126.10	118.00	112.40	112.60	108.60	123.48
1981	106.00	109.40	110.20	110.10	109.40	105.40	99.90	99.80	105.80	105.90	103.80	102.50	105.68
1982	105.40	109.60	115.50	118.80	119.60	121.10	121.10	131.10	136.10	115.70	114.80	120.10	119.08
1983	123.60	128.90	131.90	134.10	139.70	143.60	141.10	142.40	143.30	117.40	110.10	109.40	130.46
1984	111.80	114.50	117.20	115.40	110.50	104.80	95.50	94.30	91.70	87.25	86.90	85.80	101.30
1985	86.10	88.80	92.60	94.90	97.70	97.60	99.10	104.10	99.80	92.50	79.70	81.40	92.86
1986	84.20	86.60	90.10	94.50	96.40	95.60	94.60	96.60	96.40	90.00	90.60	91.60	92.27
1987	93.80	100.10	101.60	103.50	105.25	106.75	106.20	105.00	103.00	113.00	126.25	127.60	107.67
1988	130.50	133.50	136.40	138.80	139.00	138.00	141.00	145.50	149.20	134.00	129.25	125.00	136.68
1989	124.25	125.00	129.50	133.75	136.00	136.25	136.00	133.75	126.80	118.50	113.20	111.00	127.00
1990	110.00	110.00	111.25	112.00	112.00	112.00	111.25	112.20	115.00	109.00	105.40	103.00	110.26
1991	103.00	103.00	103.00	104.00	104.00	104.00	102.60	101.75	98.75	98.00	97.75	97.00	101.40
1992	96.20	99.50	102.75	106.60	111.00	112.00	115.40	124.10	125.00	111.00	109.00	113.10	110.47
1993	118.75	127.75	133.90	137.50	136.90	134.75	130.00	125.75	121.50	112.10	109.90	113.00	125.15
1994	115.40	119.90	121.60	122.00	121.00	118.30	115.90	116.75	118.10	117.30	115.40	116.40	118.17
1995	118.10												

NQ = No quotes.
1/ Reported as Central U.S. starting December 1991.

Source: Grain and Feed Market News, AMS, USDA.

Appendix table 17--Corn, sorghum, barley, and oats exports, 1975/76 to date 1/

Year and month	Corn		Sorghum	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1975/76:				1975/76:				
Sept.	75,053,640	76,955,227	27,989,402	June	836,264	975,155	57,472	61,893
Oct.	132,616,891	133,765,971	15,087,217	July	1,950,140	2,047,409	206,451	405,851
Nov.	165,253,446	166,208,159	23,107,812	Aug.	940,228	1,013,720	156,478	311,810
1st Qtr.	372,923,977	376,929,357	66,184,431	1st Qtr.	3,726,632	4,036,284	420,401	779,554
Dec.	152,819,984	153,718,172	25,175,934	Sept.	368,773	415,306	1,707,307	1,857,893
Jan.	137,508,424	138,396,658	28,001,886	Oct.	3,232,356	3,290,346	2,690,989	2,782,316
Feb.	136,507,142	137,397,080	19,016,748	Nov.	1,374,011	1,430,450	2,673,189	2,828,325
2nd Qtr.	426,835,550	429,511,910	72,194,568	2nd Qtr.	4,975,140	5,136,102	7,071,485	7,468,534
Mar.	128,992,136	130,102,227	21,010,849	Dec.	4,898,838	4,971,035	2,451,702	2,485,337
Apr.	164,220,528	165,366,095	16,787,280	Jan.	1,015,730	1,099,219	92,717	227,968
May	153,177,354	154,037,515	3,622,364	Feb.	137,889	268,500	164,429	332,902
3rd Qtr.	446,390,018	449,505,837	41,420,493	3rd Qtr.	6,052,457	6,338,754	2,708,848	3,046,207
June	159,436,466	160,639,012	7,894,661	Mar.	2,081,973	2,204,333	96,554	102,936
July	138,125,613	139,325,780	22,413,313	Apr.	1,330,542	1,404,961	196,085	505,098
Aug.	120,781,441	121,796,742	22,054,372	May	4,634,179	4,654,198	1,783,345	1,807,957
4th Qtr.	418,343,520	421,761,534	52,362,346	4th Qtr.	8,046,694	8,263,492	2,075,984	2,415,991
Total	1,664,493,065	1,677,708,638	232,161,838	Total	22,800,923	23,774,632	12,276,718	13,710,286
1976/77:				1976/77:				
Sept.	109,747,811	110,623,219	24,870,524	June	1,303,146	1,462,324	365,100	399,404
Oct.	178,936,003	179,779,470	16,635,698	July	3,287,074	3,355,973	61,659	253,988
Nov.	180,098,843	181,073,558	20,549,541	Aug.	3,478,167	3,498,931	2,244,591	2,297,468
1st Qtr.	468,782,657	471,476,247	62,055,763	1st Qtr.	8,068,387	8,317,228	2,671,350	2,950,860
Dec.	136,223,158	137,114,535	24,648,500	Sept.	6,615,438	6,722,402	1,920,409	1,928,142
Jan.	126,956,735	127,714,378	25,601,274	Oct.	13,048,078	13,356,005	570,607	867,353
Feb.	119,422,523	120,421,394	30,474,848	Nov.	7,064,569	7,271,589	2,149,816	2,187,001
2nd Qtr.	382,602,416	385,250,307	80,724,622	2nd Qtr.	26,728,085	27,349,996	4,640,832	4,982,496
Mar.	150,674,935	151,409,204	27,022,891	Dec.	7,109,317	7,222,045	603,985	630,520
Apr.	141,387,428	142,381,424	20,838,684	Jan.	3,290,070	3,380,086	84,385	146,665
May	138,834,555	139,761,801	13,598,209	Feb.	8,348,213	8,453,835	29,925	167,523
3rd Qtr.	430,896,918	433,552,429	61,459,784	3rd Qtr.	18,747,600	19,055,966	718,295	944,708
June	125,506,250	126,829,574	10,599,319	Mar.	975,528	1,069,154	57,888	217,299
July	116,130,094	117,169,062	20,078,292	Apr.	1,620,641	1,798,769	26,399	191,167
Aug.	121,200,994	122,269,617	18,996,553	May	8,647,500	8,739,038	179,887	351,199
4th Qtr.	362,837,338	366,268,253	49,674,164	4th Qtr.	11,243,669	11,606,961	264,174	759,665
Total	1,645,119,329	1,656,547,236	253,914,333	Total	64,787,741	66,330,151	8,294,651	9,637,729
1977/78:				1977/78:				
Sept.	137,146,892	138,242,808	17,077,461	June	7,678,469	7,749,102	485,973	621,814
Oct.	118,932,956	120,088,403	8,628,406	July	11,291,749	11,439,168	412,342	566,723
Nov.	143,025,556	143,918,611	17,228,249	Aug.	6,149,089	6,260,217	1,064,326	1,109,150
1st Qtr.	399,105,404	402,249,822	42,934,116	1st Qtr.	25,119,307	25,448,487	1,962,641	2,297,687
Dec.	153,111,226	154,319,205	30,106,414	Sept.	9,278,826	9,462,496	48,597	359,154
Jan.	126,914,873	127,837,959	21,237,901	Oct.	8,026,753	8,071,324	1,155,584	1,289,871
Feb.	127,836,745	128,666,686	22,910,641	Nov.	2,186,923	2,354,670	2,896,689	3,064,137
2nd Qtr.	407,862,844	410,823,850	74,254,956	2nd Qtr.	19,492,502	19,888,490	4,100,870	4,713,162
Mar.	156,643,619	158,036,734	23,826,344	Dec.	3,856,164	4,003,955	2,369,271	2,428,974
Apr.	160,804,806	161,848,500	17,768,956	Jan.	1,413,634	1,597,572	217,675	406,388
May	206,846,481	208,302,073	18,074,476	Feb.	271,263	466,385	394,969	682,456
3rd Qtr.	524,294,906	528,187,307	59,669,776	3rd Qtr.	5,541,061	6,067,912	2,981,915	3,517,818
June	214,018,311	214,770,184	10,145,984	Mar.	145,741	258,834	28,124	445,153
July	171,102,334	172,090,084	19,738,833	Apr.	2,017,960	2,269,261	23,525	261,335
Aug.	180,012,802	181,086,842	16,098,547	May	3,180,917	3,272,925	905,899	1,036,135
4th Qtr.	565,133,447	567,947,110	45,983,364	4th Qtr.	5,344,618	5,801,020	957,548	1,742,623
Total	1,896,396,601	1,909,208,089	222,842,212	Total	55,497,488	57,205,909	10,002,974	12,271,290

See footnotes at end of table.

Continued--

Appendix table 17--Corn, sorghum, barley, and oats exports, 1975/76 to date 1/

Year and month	Corn		Sorghum	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1978/79:				1977/78:				
Sept.	176,033,904	176,861,083	7,735,700	June	4,205,002	4,353,093	435,464	588,122
Oct.	139,263,490	139,981,749	8,615,589	July	5,066,677	5,156,021	1,303,880	1,668,021
Nov.	153,542,028	154,313,955	18,954,600	Aug.	4,929,079	5,006,603	5,293,313	5,369,592
1st Qtr.	468,839,422	471,156,787	35,305,889	1st Qtr.	14,200,758	14,515,717	7,032,657	7,625,735
Dec.	158,883,560	159,709,773	18,988,714	Sept.	4,242,932	4,291,050	48,251	250,893
Jan.	129,906,845	130,856,541	19,285,385	Oct.	3,080,214	3,167,923	1,343,835	1,576,218
Feb.	124,518,081	125,094,088	26,989,459	Nov.	978,381	1,019,054	285,557	519,770
2nd Qtr.	413,308,486	415,660,402	65,263,558	2nd Qtr.	8,301,527	8,478,027	1,677,643	2,346,881
Mar.	169,263,126	170,303,627	22,069,207	Dec.	266,814	471,044	1,227,047	1,336,346
Apr.	187,095,271	188,081,747	13,038,349	Jan.	574,365	682,389	41,947	283,427
May	198,288,881	199,135,575	14,922,212	Feb.	46,265	107,278	28,584	138,700
3rd Qtr.	554,647,278	557,520,949	50,029,768	3rd Qtr.	887,444	1,260,711	1,297,578	1,758,473
June	229,474,993	230,777,184	9,452,058	Mar.	3,735	41,817	54,088	288,819
July	221,669,115	222,671,382	13,011,285	Apr.	220,154	309,868	81,658	237,250
Aug.	225,178,576	225,884,821	17,029,193	May	1,035,595	1,091,820	195,887	418,606
4th Qtr.	676,322,684	679,333,387	39,492,536	4th Qtr.	1,259,484	1,443,505	331,633	944,675
Total	2,113,117,870	2,123,671,525	190,091,751	Total	24,649,213	25,697,960	10,339,511	12,675,764
1979/80:				1979/80:				
Sept.	185,070,433	186,246,851	24,223,910	June	2,212,317	2,282,851	120,868	247,616
Oct.	214,345,983	215,526,560	21,583,642	July	2,446,725	2,527,595	42,528	140,915
Nov.	221,857,150	223,007,799	26,229,212	Aug.	2,719,552	2,811,124	105,109	254,874
1st Qtr.	621,273,566	624,781,210	72,036,764	1st Qtr.	7,378,594	7,621,570	268,505	643,405
Dec.	223,411,029	224,356,785	26,386,501	Sept.	2,221,823	2,276,736	144,474	211,556
Jan.	189,912,018	190,929,805	37,438,737	Oct.	9,284,368	9,514,648	95,188	164,665
Feb.	184,412,948	185,516,630	39,082,513	Nov.	8,143,400	8,336,890	870,027	984,369
2nd Qtr.	597,735,995	600,803,220	102,907,751	2nd Qtr.	19,649,591	20,128,274	1,109,689	1,360,590
Mar.	204,333,868	205,545,642	32,000,475	Dec.	4,218,627	4,500,253	645,337	726,279
Apr.	213,500,454	214,521,960	35,394,225	Jan.	3,042,486	3,173,696	98,074	275,844
May	169,938,362	171,104,012	24,939,765	Feb.	3,641,315	3,911,450	18,760	97,572
3rd Qtr.	587,772,684	591,171,614	92,334,465	3rd Qtr.	10,902,428	11,585,399	762,171	1,099,695
June	191,853,582	193,158,972	24,957,177	Mar.	3,843,733	4,052,579	60,276	89,764
July	196,938,173	198,356,492	22,312,730	Apr.	6,525,141	6,692,569	229,439	418,534
Aug.	205,942,297	207,054,727	15,122,775	May	4,520,778	4,747,733	327,568	430,851
4th Qtr.	594,734,052	598,570,191	62,392,682	4th Qtr.	14,889,652	15,492,881	617,283	939,149
Total	2,401,516,297	2,415,326,235	329,671,662	Total	52,820,265	54,828,124	2,757,648	4,042,839
1980/81:				1980/81:				
Sept.	202,462,112	203,528,019	19,533,279	June	5,022,971	5,097,866	580,924	1,006,889
Oct.	240,698,485	242,279,498	22,543,461	July	3,628,339	3,702,871	327,415	785,586
Nov.	244,706,069	245,871,275	25,367,196	Aug.	9,211,534	9,349,242	638,725	1,101,431
1st Qtr.	687,866,666	691,678,792	67,443,936	1st Qtr.	17,862,844	18,149,979	1,547,064	2,893,906
Dec.	238,328,292	239,663,630	18,308,338	Sept.	6,658,108	6,740,218	793,059	953,125
Jan.	207,962,746	209,110,242	28,807,953	Oct.	5,504,702	5,554,355	1,306,243	1,597,563
Feb.	199,682,732	200,654,523	28,934,912	Nov.	6,666,060	6,808,903	46,960	363,072
2nd Qtr.	645,973,770	649,428,395	76,051,203	2nd Qtr.	18,828,870	19,103,476	2,146,262	2,913,760
Mar.	221,866,761	223,109,865	26,318,245	Dec.	8,916,215	9,085,383	785,897	861,436
Apr.	184,884,549	186,633,809	19,487,235	Jan.	6,315,403	6,388,116	189,156	573,991
May	207,201,786	209,094,680	22,218,323	Feb.	11,466,729	11,500,117	1,087,421	1,400,038
3rd Qtr.	613,953,096	618,838,354	68,023,803	3rd Qtr.	26,698,347	26,973,616	2,062,474	2,835,465
June	157,486,785	159,443,572	19,998,909	Mar.	4,666,953	4,776,513	230,384	633,818
July	146,636,959	148,074,369	29,469,237	Apr.	3,516,330	3,542,993	1,560,078	2,260,296
Aug.	139,188,454	140,514,903	32,171,898	May	4,087,044	4,173,387	1,293,251	1,730,912
4th Qtr.	443,312,198	448,032,844	81,640,044	4th Qtr.	12,270,327	12,492,893	3,083,713	4,625,026
Total	2,391,105,730	2,407,978,385	293,158,986	Total	75,660,388	76,719,964	8,839,513	13,268,157

See footnotes at end of table.

Continued--

Appendix table 17--Corn, sorghum, barley, and oats exports, 1975/76 to date 1/

Year and month	Corn		Sorghum	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1981/82:				1981/82:				
Sept.	149,655,085	150,744,952	30,963,092	June	1,457,555	1,508,625	372,009	549,202
Oct.	194,694,429	195,728,034	28,388,473	July	6,528,945	6,661,102	366,463	1,092,743
Nov.	174,729,965	176,251,502	18,657,408	Aug.	12,243,107	12,365,441	648,960	782,716
1st Qtr.	519,079,479	522,724,488	78,008,973	1st Qtr.	20,229,607	20,535,168	1,387,432	2,424,661
Dec.	172,337,796	173,551,973	30,772,465	Sept.	11,902,257	12,026,473	436,435	793,962
Jan.	150,895,856	151,627,601	29,552,315	Oct.	16,462,060	16,507,711	202,460	505,977
Feb.	146,989,364	147,749,277	19,453,452	Nov.	8,631,927	8,722,744	59,430	402,684
2nd Qtr.	470,223,016	472,928,851	79,778,232	2nd Qtr.	36,996,244	37,256,928	698,325	1,702,623
Mar.	189,001,536	190,066,366	25,286,333	Dec.	7,636,656	7,746,899	72,350	266,238
Apr.	194,887,043	195,755,373	13,509,047	Jan.	8,332,073	8,455,568	114,472	443,737
May	211,950,747	213,198,644	8,259,377	Feb.	8,088,777	8,207,953	122,192	265,405
3rd Qtr.	595,839,326	599,020,383	47,054,757	3rd Qtr.	24,057,506	24,410,420	309,014	975,380
June	179,668,292	180,443,235	11,386,253	Mar.	5,887,140	6,474,477	99,231	450,891
July	119,477,568	120,516,417	20,242,006	Apr.	3,808,701	3,863,179	38,448	553,340
Aug.	112,474,351	113,953,288	23,142,497	May	7,403,111	7,517,119	154,417	446,421
4th Qtr.	411,620,211	414,912,940	54,770,756	4th Qtr.	17,098,952	17,854,775	292,096	1,450,652
Total	1,996,762,032	2,009,586,662	259,612,718	Total	98,382,309	100,057,291	2,686,867	6,553,316
1982/83:				1982/83:				
Sept.	107,215,457	108,059,024	20,428,581	June	5,928,163	6,296,843	52,361	603,692
Oct.	166,335,228	167,217,946	18,383,056	July	4,165,507	4,862,814	70,751	240,205
Nov.	169,586,560	170,887,184	19,234,195	Aug.	8,196,824	8,579,926	48,700	197,183
1st Qtr.	443,137,245	446,164,154	58,045,832	1st Qtr.	18,290,494	19,739,583	171,812	1,041,080
Dec.	173,558,165	174,573,008	29,354,316	Sept.	5,561,112	5,678,174	197,917	289,602
Jan.	174,707,042	175,440,799	25,050,652	Oct.	1,440,901	1,516,155	71,782	581,391
Feb.	161,304,672	162,010,945	17,975,892	Nov.	2,494,002	2,987,818	158,162	197,106
2nd Qtr.	509,569,879	512,024,752	72,380,860	2nd Qtr.	9,496,015	10,182,147	427,861	1,068,099
Mar.	169,409,637	170,420,490	19,694,606	Dec.	1,833,788	1,940,049	29,127	210,451
Apr.	157,314,623	158,573,125	5,348,135	Jan.	7,454,630	7,580,831	41,047	75,440
May	148,587,837	149,958,142	8,726,291	Feb.	1,410,838	1,492,942	32,518	123,897
3rd Qtr.	475,312,097	478,951,757	33,769,032	3rd Qtr.	10,699,256	11,013,822	102,692	409,788
June	150,589,182	151,822,069	9,889,322	Mar.	3,523,829	3,669,317	26,152	80,122
July	123,534,997	124,569,819	16,494,246	Apr.	29,375	223,988	16,040	207,447
Aug.	119,201,764	120,193,101	19,474,765	May	2,130,966	2,395,182	5,867	206,939
4th Qtr.	393,325,943	396,584,989	45,858,333	4th Qtr.	5,684,170	6,288,487	48,059	494,508
Total	1,821,345,164	1,833,725,652	210,054,057	Total	44,169,935	47,224,039	750,424	3,013,475
1983/84:				1983/84:				
Sept.	142,605,075	144,282,518	24,843,392	June	1,749,278	1,962,746	20,066	170,314
Oct.	154,746,149	155,588,111	22,517,772	July	1,219,801	1,332,753	85,615	276,124
Nov.	196,023,261	197,175,227	20,090,581	Aug.	5,858,487	5,950,159	16,399	190,354
1st Qtr.	493,374,485	497,045,856	67,451,745	1st Qtr.	8,827,566	9,245,658	122,080	636,792
Dec.	175,217,363	176,176,687	19,536,615	Sept.	14,055,167	14,152,120	66,102	120,532
Jan.	172,472,646	173,394,560	27,006,928	Oct.	8,017,640	8,100,296	348,182	489,411
Feb.	158,202,220	158,971,946	25,013,805	Nov.	9,025,053	9,128,165	84,892	128,597
2nd Qtr.	505,892,229	508,543,193	71,557,348	2nd Qtr.	31,097,860	31,380,581	499,176	738,540
Mar.	176,208,558	177,553,953	25,761,817	Dec.	15,402,481	15,638,039	42,383	128,719
Apr.	174,344,582	175,342,494	14,599,452	Jan.	7,544,651	7,820,115	27,417	88,611
May	162,845,594	164,383,668	14,890,486	Feb.	5,797,474	6,047,572	15,377	47,266
3rd Qtr.	513,398,734	517,280,115	55,251,755	3rd Qtr.	28,744,606	29,505,726	85,177	264,596
June	110,199,008	112,251,470	10,354,830	Mar.	10,841,262	11,217,537	39,239	198,298
July	128,242,982	130,068,232	21,979,636	Apr.	5,570,656	5,968,499	171,313	220,808
Aug.	135,289,472	136,339,843	17,884,104	May	3,735,785	4,106,217	24,589	113,676
4th Qtr.	373,731,462	378,659,545	50,218,570	4th Qtr.	20,147,703	21,292,253	235,141	532,782
Total	1,886,396,910	1,901,528,709	244,479,418	Total	88,817,735	91,424,218	941,574	2,172,710

See footnotes at end of table.

Continued--

Appendix table 17--Corn, sorghum, barley, and oats exports, 1975/76 to date 1/

Year and month	Corn		Sorghum	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1984/85:				1984/85:				
Sept.	107,064,816	108,016,147	26,778,001	June	4,668,354	4,884,210	16,340	204,719
Oct.	154,055,992	155,233,827	36,290,021	July	1,506,275	2,146,787	51,644	162,650
Nov.	242,124,317	242,966,896	22,711,771	Aug.	4,965,763	5,155,469	28,335	37,065
1st Qtr.	503,245,125	506,216,870	85,779,793	1st Qtr.	11,140,392	12,186,466	96,319	404,434
Dec.	206,686,724	207,683,410	25,549,874	Sept.	17,185,453	17,474,876	58,861	188,704
Jan.	208,081,216	208,846,539	29,096,442	Oct.	8,750,660	8,959,255	78,898	132,116
Feb.	165,648,304	167,345,348	32,640,358	Nov.	9,226,887	9,937,205	25,988	67,587
2nd Qtr.	580,416,244	583,875,297	87,286,614	2nd Qtr.	35,163,000	36,371,336	163,747	388,407
Mar.	170,693,089	171,901,549	26,133,824	Dec.	10,739,791	11,773,706	45,452	66,239
Apr.	167,741,483	169,045,309	19,774,404	Jan.	6,023,494	7,154,739	27,349	56,389
May	136,292,380	137,951,801	17,817,664	Feb.	4,249,537	4,712,199	44,293	107,702
3rd Qtr.	474,726,952	478,898,659	63,725,892	3rd Qtr.	21,012,822	23,640,644	117,094	230,330
June	105,494,909	107,810,557	25,247,583	Mar.	1,173,727	1,258,040	68,000	75,236
July	95,527,431	96,758,258	18,747,724	Apr.	227,362	367,280	35,822	120,640
Aug.	90,839,919	91,826,779	16,117,507	May	2,937,606	3,013,712	13,925	48,363
4th Qtr.	291,862,259	296,395,594	60,112,814	4th Qtr.	4,338,695	4,639,032	117,747	244,239
Total	1,850,250,580	1,865,386,420	296,905,113	Total	71,654,909	76,837,478	494,907	1,267,410
1985/86:				1985/86:				
Sept.	79,897,274	80,730,953	29,172,725	June	1,487,412	1,649,817	44,678	87,396
Oct.	124,900,086	125,817,956	23,654,139	July	3,731,241	3,860,606	23,529	69,692
Nov.	210,005,197	211,178,800	17,378,277	Aug.	5,179,203	5,303,587	33,906	163,983
1st Qtr.	414,802,557	417,727,709	70,205,141	1st Qtr.	10,397,856	10,814,010	102,113	321,071
Dec.	175,971,674	178,512,062	11,858,105	Sept.	831,326	937,470	52,866	89,470
Jan.	164,709,634	166,061,297	17,264,657	Oct.	2,652,026	2,799,218	120,219	153,203
Feb.	119,524,523	120,682,252	13,994,213	Nov.	3,768,477	3,869,960	111,195	350,174
2nd Qtr.	460,205,831	465,255,611	43,116,975	2nd Qtr.	7,251,829	7,606,648	284,280	592,847
Mar.	97,479,313	98,402,168	6,723,066	Dec.	112,702	237,932	23,556	37,750
Apr.	57,426,414	58,213,068	8,597,402	Jan.	1,119,603	1,546,100	8,934	69,750
May	46,520,450	47,775,127	11,610,994	Feb.	49,160	116,456	43,584	96,515
3rd Qtr.	201,426,177	204,390,363	26,931,462	3rd Qtr.	1,281,465	1,900,488	76,074	204,015
June	55,802,755	56,818,892	10,467,071	Mar.	1,148	192,476	250,397	288,260
July	44,609,875	45,480,958	17,830,311	Apr.	720,309	816,587	49,085	93,425
Aug.	50,484,684	51,552,942	9,436,885	May	57,584	472,599	473,733	693,272
4th Qtr.	150,897,314	153,852,792	37,734,267	4th Qtr.	779,041	1,481,662	773,215	1,074,957
Total	1,227,331,879	1,241,226,475	177,987,845	Total	19,710,191	21,802,808	1,235,682	2,192,890
1986/87:				1986/87:				
Sept.	80,082,655	81,263,962	14,227,263	June	2,000	276,815	79,108	128,492
Oct.	124,025,138	124,843,757	18,547,828	July	1,164,620	1,597,139	81,504	217,421
Nov.	114,104,314	114,952,811	14,680,456	Aug.	12,319,164	12,514,711	73,364	335,437
1st Qtr.	318,212,107	321,060,530	47,455,547	1st Qtr.	13,485,784	14,388,665	233,976	681,350
Dec.	109,759,488	110,685,062	19,954,747	Sept.	12,772,707	12,912,177	121,288	327,625
Jan.	104,283,400	105,274,114	15,484,239	Oct.	16,480,986	16,559,353	167,403	411,976
Feb.	98,787,906	99,445,787	20,749,712	Nov.	14,292,746	14,363,851	32,293	167,870
2nd Qtr.	312,830,794	315,404,963	56,188,698	2nd Qtr.	43,546,439	43,835,381	320,984	907,471
Mar.	143,717,211	145,375,500	24,415,530	Dec.	14,532,134	14,661,828	17,314	315,049
Apr.	183,288,269	184,280,573	12,956,519	Jan.	1,205,709	1,262,335	30,960	75,145
May	169,091,351	170,576,405	13,788,332	Feb.	16,084,544	16,522,282	30,776	178,452
3rd Qtr.	496,096,831	500,232,478	51,160,381	3rd Qtr.	31,822,387	32,446,445	79,050	568,646
June	120,026,244	120,818,241	12,940,287	Mar.	17,639,725	18,150,611	115,234	277,846
July	133,984,531	134,900,706	22,883,734	Apr.	16,599,968	17,153,570	105,251	191,418
Aug.	111,320,100	112,008,863	7,698,710	May	10,522,937	10,726,481	67,436	168,607
4th Qtr.	365,330,875	367,727,810	43,522,731	4th Qtr.	44,762,630	46,030,662	287,921	637,871
Total	1,492,470,607	1,504,425,781	198,327,357	Total	133,617,240	136,701,153	921,931	2,795,338

See footnotes at end of table.

Continued--

Appendix table 17--Corn, sorghum, barley, and oats exports, 1975/76 to date 1/

Year and month	Corn		Sorghum	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1987/88:				1987/88:				
Sept.	135,401,494	136,128,505	17,831,044	June	517,681	742,738	104,217	187,886
Oct.	137,692,620	138,784,114	16,734,001	July	7,421,463	7,675,579	50,113	92,430
Nov.	122,467,307	123,085,243	10,968,017	Aug.	8,893,825	9,257,652	18,135	153,171
1st Qtr.	395,561,421	397,997,861	45,533,062	1st Qtr.	16,832,969	17,675,969	172,465	433,487
Dec.	148,173,110	149,269,833	21,239,967	Sept.	9,658,418	10,363,963	36,051	74,210
Jan.	133,336,988	134,196,121	19,399,501	Oct.	16,149,719	17,238,723	62,220	144,789
Feb.	123,237,769	124,218,907	22,498,453	Nov.	16,700,948	18,605,946	38,617	99,130
2nd Qtr.	404,747,867	407,684,861	63,137,921	2nd Qtr.	42,509,085	46,208,631	136,888	318,129
Mar.	164,083,150	165,253,019	24,662,618	Dec.	15,583,102	16,123,445	5,680	36,703
Apr.	166,222,992	166,980,188	30,324,679	Jan.	10,672,812	10,910,229	96,376	147,370
May	179,365,299	180,377,177	22,103,010	Feb.	6,764,525	7,239,965	29,937	148,578
3rd Qtr.	509,671,441	512,610,384	77,090,307	3rd Qtr.	33,020,439	34,273,639	131,993	332,652
June	132,934,667	133,784,539	13,740,797	Mar.	15,349,596	15,756,272	24,173	49,618
July	122,945,548	124,276,098	20,243,604	Apr.	8,796,666	9,029,851	12,420	114,674
Aug.	150,564,179	151,445,670	11,836,824	May	4,470,071	4,979,881	22,950	215,233
4th Qtr.	406,444,394	409,506,307	45,821,225	4th Qtr.	28,616,333	29,766,004	59,543	379,525
Total	1,716,425,122	1,727,799,414	231,582,514	Total	120,978,826	127,924,243	500,889	1,463,793
1988/89:				1988/89:				
Sept.	150,843,842	151,736,284	26,656,522	June	12,108,210	12,402,962	102,245	258,289
Oct.	170,295,536	171,523,785	19,499,969	July	11,513,586	11,757,762	38,739	88,239
Nov.	149,632,839	151,030,488	18,319,440	Aug.	2,214,904	2,500,232	24,394	145,962
1st Qtr.	470,772,217	474,290,557	64,475,931	1st Qtr.	25,836,700	26,660,956	165,378	492,490
Dec.	172,492,326	173,546,904	27,975,619	Sept.	8,758,198	8,833,519	21,017	90,049
Jan.	175,046,573	176,312,633	32,501,854	Oct.	1,432,089	2,161,176	30,378	57,096
Feb.	154,306,113	157,574,092	33,002,741	Nov.	2,452,268	3,055,490	73,371	126,759
2nd Qtr.	501,845,012	507,433,629	93,480,214	2nd Qtr.	12,642,555	14,050,185	124,766	273,904
Mar.	202,368,345	205,460,456	30,637,747	Dec.	15,121,435	15,440,102	29,605	51,848
Apr.	176,784,473	179,222,131	28,248,012	Jan.	80,147	413,415	115,949	154,007
May	210,557,382	212,026,525	21,693,179	Feb.	81,479	439,947	65,243	112,583
3rd Qtr.	589,710,200	596,709,112	80,578,938	3rd Qtr.	15,283,061	16,293,464	210,797	318,438
June	223,487,671	225,075,248	24,103,922	Mar.	1,964,318	2,424,402	22,528	70,335
July	133,142,282	134,985,912	25,119,356	Apr.	13,487,280	14,246,609	27,696	69,705
Aug.	106,804,527	109,292,691	23,735,155	May	9,713,427	10,504,815	27,144	60,605
4th Qtr.	463,434,480	469,353,851	72,958,433	4th Qtr.	25,165,025	27,175,826	77,368	200,645
Total	2,025,761,909	2,047,787,149	311,493,516	Total	78,927,341	84,180,431	578,309	1,285,477
1989/90:				1989/90:				
Sept.	113,777,062	116,262,534	33,760,429	June	7,364,678	8,121,997	73,579	134,643
Oct.	174,741,954	176,889,553	33,729,308	July	9,666,165	10,690,512	99,552	154,365
Nov.	293,764,876	295,404,866	22,408,021	Aug.	9,505,320	9,979,201	56,356	181,703
1st Qtr.	582,283,892	588,556,953	89,897,758	1st Qtr.	26,536,163	28,791,710	229,487	470,711
Dec.	258,806,717	260,503,877	19,612,682	Sept.	8,060,098	9,274,442	137,376	245,869
Jan.	239,115,303	241,192,495	33,378,664	Oct.	4,634,070	5,354,201	86,669	183,583
Feb.	183,848,863	186,700,501	28,182,433	Nov.	4,520,991	5,397,819	46,917	103,737
2nd Qtr.	681,770,882	688,396,873	81,173,779	2nd Qtr.	17,215,159	20,026,462	270,962	533,189
Mar.	193,492,212	197,237,477	31,489,103	Dec.	9,910,327	10,568,632	56,080	83,160
Apr.	193,837,455	199,184,860	27,623,294	Jan.	6,037,633	6,879,490	59,387	93,073
May	213,255,201	216,452,130	22,230,984	Feb.	6,786,607	6,980,135	36,790	65,546
3rd Qtr.	600,584,868	612,874,467	81,343,381	3rd Qtr.	22,734,567	24,428,257	152,257	241,779
June	201,188,633	204,550,034	12,501,920	Mar.	566,358	800,688	66,621	102,014
July	148,720,338	152,418,602	14,517,591	Apr.	8,154,575	9,663,656	71,995	110,933
Aug.	153,686,445	158,203,798	23,760,663	May	8,829,603	9,018,269	32,380	63,654
4th Qtr.	503,595,416	515,172,434	50,780,174	4th Qtr.	17,550,536	19,482,613	170,996	276,601
Total	2,368,235,058	2,405,000,727	303,195,092	Total	84,036,425	92,729,042	823,702	1,522,280

See footnotes at end of table.

Continued--

Appendix table 17--Corn, sorghum, barley, and oats exports, 1975/76 to date 1/

Year and month	Corn		Sorghum	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1990/91:				1990/91:				
Sept.	104,481,725	107,660,786	18,212,550	June	11,117,541	11,513,925	97,279	1,570,692
Oct.	108,167,173	111,681,827	17,699,775	July	9,710,625	10,087,024	40,786	85,603
Nov.	168,267,057	171,969,242	20,675,433	Aug.	10,034,291	10,539,588	44,988	110,494
1st Qtr.	380,915,955	391,311,855	56,587,758	1st Qtr.	30,862,457	32,140,537	183,053	1,766,789
Dec.	142,014,814	144,624,717	17,623,325	Sept.	1,988,477	3,087,548	126,284	169,650
Jan.	145,445,932	149,685,190	16,913,071	Oct.	14,051,755	14,502,068	60,283	128,768
Feb.	183,223,004	188,180,356	26,673,364	Nov.	9,145,553	9,384,739	44,644	114,072
2nd Qtr.	470,683,750	482,490,263	61,209,760	2nd Qtr.	25,185,785	26,974,355	231,211	412,490
Mar.	188,842,557	192,831,722	29,896,642	Dec.	12,191,330	13,434,072	16,328	72,335
Apr.	144,273,134	146,807,586	29,567,333	Jan.	5,306,020	5,997,147	56,218	123,360
May	120,483,221	125,189,787	16,533,105	Feb.	1,110,670	1,517,806	21,908	87,315
3rd Qtr.	453,598,912	464,829,095	75,997,080	3rd Qtr.	18,608,020	20,949,025	94,454	283,010
June	105,294,130	108,117,400	4,063,146	Mar.	2,768,592	3,627,196	23,631	2,293,212
July	163,712,172	169,497,385	14,771,928	Apr.	438,674	1,083,202	40,510	183,270
Aug.	150,394,375	153,885,735	19,554,555	May	2,764,091	4,068,414	38,168	136,809
4th Qtr.	419,400,677	431,500,520	38,389,629	4th Qtr.	5,971,357	8,778,813	102,308	2,613,291
Total	1,724,599,294	1,770,131,733	232,184,227	Total	80,627,619	88,842,730	611,026	5,075,580
1991/92:				1991/92:				
Sept.	134,767,135	137,614,861	14,959,285	June	679,758	1,335,352	58,422	121,576
Oct.	136,956,614	140,060,404	16,459,811	July	5,394,343	6,485,240	53,049	149,435
Nov.	149,537,473	152,976,219	15,121,274	Aug.	7,408,540	8,107,346	23,011	99,658
1st Qtr.	421,261,222	430,651,484	46,540,370	1st Qtr.	13,482,641	15,927,938	134,482	370,669
Dec.	127,343,966	130,025,340	30,157,833	Sept.	8,661,501	9,477,281	84,602	170,262
Jan.	100,189,249	102,917,540	35,198,141	Oct.	13,090,494	13,776,430	96,659	202,500
Feb.	134,155,436	136,462,241	42,850,982	Nov.	14,911,420	15,449,001	19,704	177,377
2nd Qtr.	361,688,651	369,405,121	108,206,956	2nd Qtr.	36,663,415	38,702,712	200,965	550,139
Mar.	124,300,247	126,979,997	34,571,072	Dec.	7,929,933	8,234,664	20,875	242,713
Apr.	142,446,226	145,122,719	45,425,727	Jan.	11,515,981	11,782,314	109,956	371,445
May	104,711,888	107,538,905	25,007,215	Feb.	5,187,016	5,698,245	48,226	202,737
3rd Qtr.	371,458,361	379,641,621	105,004,014	3rd Qtr.	24,632,930	25,715,223	179,057	816,895
June	147,780,588	150,657,616	8,305,140	Mar.	1,686,720	2,130,608	320,910	651,232
July	146,358,254	149,453,379	9,326,321	Apr.	11,396,426	12,749,187	673,168	813,441
Aug.	135,557,511	137,710,736	14,349,388	May	6,636,142	7,546,220	394,834	523,435
4th Qtr.	429,696,353	437,821,730	31,980,849	4th Qtr.	19,719,288	22,426,015	1,388,912	1,988,108
Total	1,584,104,587	1,617,519,956	291,732,189	Total	94,498,274	102,771,888	1,903,416	3,725,811
1992/93:				1992/93:				
Sept.	153,957,070	156,440,679	23,555,198	June	6,112,452	7,571,349	337,169	451,272
Oct.	139,423,233	142,209,375	19,463,829	July	5,114,631	5,669,888	319,670	437,796
Nov.	194,133,827	196,891,684	13,422,100	Aug.	7,136,040	7,769,056	376,990	658,652
1st Qtr.	487,514,130	495,541,738	56,441,127	1st Qtr.	18,363,123	21,010,293	1,033,830	1,547,720
Dec.	173,102,447	175,239,774	33,459,163	Sept.	5,269,184	5,968,023	704,032	902,051
Jan.	153,676,630	155,732,807	33,278,777	Oct.	6,811,777	7,581,022	925,252	1,127,925
Feb.	136,262,663	138,416,028	34,737,232	Nov.	9,947,530	10,406,612	429,419	621,799
2nd Qtr.	463,041,740	469,388,609	101,475,172	2nd Qtr.	22,028,491	23,955,657	2,058,704	2,651,775
Mar.	135,915,165	138,816,513	32,915,201	Dec.	8,404,065	9,162,048	292,870	455,869
Apr.	153,345,015	156,300,395	35,576,476	Jan.	3,686,266	4,645,437	412,402	512,386
May	122,030,479	124,811,344	18,923,576	Feb.	9,844,877	10,362,364	650,777	814,240
3rd Qtr.	411,290,659	419,928,252	87,415,253	3rd Qtr.	21,935,208	24,169,849	1,356,049	1,782,495
June	111,325,832	114,691,178	4,939,828	Mar.	5,658,346	7,324,734	444,645	514,950
July	91,300,944	94,188,399	12,041,956	Apr.	6,519,618	8,833,155	502,240	607,670
Aug.	98,804,662	101,518,710	14,879,077	May	5,768,991	6,935,036	304,789	460,022
4th Qtr.	301,431,438	310,398,287	31,860,861	4th Qtr.	17,946,955	23,092,925	1,251,674	1,582,642
Total	1,663,277,967	1,695,256,886	277,192,413	Total	80,273,777	92,228,724	5,700,257	7,564,632

Continued--

Appendix table 17--Corn, sorghum, barley, and oats exports, 1975/76 to date 1/

Year and month	Corn		Sorghum	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1993/94:				1993/94:				
Sept.	138,867,694	142,258,582	14,698,166	June	3,878,573	5,772,239	636,998	767,269
Oct.	151,370,539	154,834,516	13,646,045	July	4,654,967	5,810,001	365,209	527,025
Nov.	145,171,373	149,012,561	10,904,887	Aug.	6,095,596	7,034,349	543,784	681,113
1st Qtr.	435,409,606	446,105,659	39,249,098	1st Qtr.	14,629,136	18,616,589	1,545,991	1,975,407
Dec.	141,959,529	145,783,316	17,376,483	Sept.	2,694,186	3,775,619	317,741	508,061
Jan.	101,814,263	104,362,995	19,591,247	Oct.	6,690,201	7,279,119	337,445	523,511
Feb.	86,221,275	89,145,290	23,446,505	Nov.	5,797,283	6,417,955	45,195	215,654
2nd Qtr.	329,995,067	339,291,601	60,414,235	2nd Qtr.	15,181,670	17,472,693	700,381	1,247,226
Mar.	111,186,983	115,149,749	27,258,986	Dec.	7,965,621	8,213,410	171,409	324,143
Apr.	86,418,560	89,114,616	19,397,929	Jan.	590,150	874,280	250,478	400,291
May	72,243,003	76,292,492	17,017,555	Feb.	3,552,133	3,786,330	99,415	264,103
3rd Qtr.	269,848,546	280,556,857	63,674,469	3rd Qtr.	12,107,904	12,874,020	521,302	988,537
June	86,503,878	90,441,024	9,360,785	Mar.	2,708,743	3,025,487	80,808	374,054
July	93,042,171	96,832,729	12,840,993	Apr.	12,214,039	13,070,171	85,125	244,063
Aug.	113,522,604	116,554,612	16,028,582	May	9,216,549	10,413,805	68,604	224,003
4th Qtr.	293,068,653	303,828,365	38,230,360	4th Qtr.	24,139,332	26,509,463	234,537	842,120
Total	1,328,321,872	1,369,782,482	201,568,162	Total	66,058,042	75,472,764	3,002,211	5,053,289
1994/95:				1994/95:				
Sept.	115,520,553	118,880,498	22,504,105	June	1,404,666	2,158,955	64,623	198,389
Oct.	139,916,653	143,484,876	20,517,676	July	12,006,416	12,824,548	103,429	269,293
Nov.	193,866,581	197,068,142	21,058,565	Aug.	6,935,190	7,588,506	22,031	154,642
1st Qtr.	449,303,787	459,433,516	64,080,346	1st Qtr.	20,346,271	22,572,009	190,083	622,324
Dec.	207,171,697	210,392,248	22,148,690	Sept.	4,575,928	5,108,067	84,182	262,535
Jan.	190,433,028	193,245,678	20,795,575	Oct.	4,849,013	5,887,250	76,866	193,930
Feb.	192,829,808	195,242,265	17,983,517	Nov.	9,189,888	10,189,981	63,606	236,012
2nd Qtr.	590,434,533	598,880,191	60,927,782	2nd Qtr.	18,614,830	21,185,298	224,654	692,476
Mar.	196,274,074	198,854,068	18,123,730	Dec.	6,271,323	6,939,740	146,740	264,234
Apr.	165,098,126	168,024,256	13,636,923	Jan.	2,537,261	3,297,400	201,436	306,639
May	206,789,457	211,076,640	22,592,804	Feb.	1,724,520	2,407,919	18,267	114,150
3rd Qtr.	568,161,657	577,954,964	54,353,457	3rd Qtr.	10,533,103	12,645,059	366,442	685,023
June	167,713,911	172,083,405	14,943,046	Mar.	8,350,294	9,352,613	97,476	817,623
July	192,044,865	195,797,089	12,045,503	Apr.	1,565,723	2,656,741	42,387	381,637
Aug.	209,822,784	213,429,242	16,338,678	May	6,830,175	7,744,875	67,888	182,654
4th Qtr.	569,581,560	581,309,736	43,327,227	4th Qtr.	16,746,192	19,754,228	207,751	1,381,914
Total	2,177,481,537	2,217,578,407	222,688,814	Total	66,240,396	76,156,594	988,930	3,381,737
1995/96:				1995/96:				
Sept.	250,425,944	253,314,010	24,207,538	June	4,258,838	5,235,937	191,188	370,138
Oct.				July	5,165,200	6,016,639	110,199	312,824
Nov.				Aug.	7,219,448	7,814,993	144,319	438,680
1st Qtr.				1st Qtr.	16,643,486	19,067,569	445,706	1,121,642
Dec.				Sept.	4,325,961	5,424,101	158,590	388,532

1/ Total corn exports include grain only (white, yellow, seed, relief), dry process (cornmeal for relief, as grain, grits), and wet process (corn starch, sugar dextrose, glucose, high fructose). Sorghum includes seed and unmilled. Barley includes grain only (grain for malting purposes, other) and barley malt. Oats include grain and oatmeal (bulk and packaged).

Source: Bureau of the Census, U.S. Department of Commerce.

Appendix table 18--Corn, sorghum, barley, and oats imports, 1975/76 to date 1/

Year and month	Corn		Sorghu	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1975/76:				1975/76				
Sept.	48,468	49,894	1,177	June	759,873	1,016,094	95,341	104,362
Oct.	172,388	204,758	0	July	898,065	1,262,809	87,448	95,062
Nov.	19,550	69,861	0	Aug.	2,358,988	2,707,006	64,522	66,588
1st Qtr.	240,406	324,513	1,177	1st Qtr.	4,016,926	4,985,909	247,311	266,012
Dec.	267,752	303,437	0	Sept.	1,436,833	1,804,423	6,357	9,663
Jan.	184,083	221,905	0	Oct.	783,803	1,093,718	8,574	30,049
Feb.	144,936	176,862	0	Nov.	781,713	1,169,351	19,070	21,484
2nd Qtr.	596,771	702,204	0	2nd Qtr.	3,002,349	4,067,492	34,001	61,196
Mar.	134,347	145,986	0	Dec.	2,025,728	2,352,469	27,389	42,320
Apr.	48,183	55,922	0	Jan.	835,254	1,087,702	107,560	132,659
May	22,372	27,433	0	Feb.	784,581	969,243	35,929	47,306
3rd Qtr.	204,902	229,341	0	3rd Qtr.	3,645,563	4,409,414	170,878	222,285
June	304,818	315,434	70	Mar.	590,585	690,283	21,257	23,335
July	78,435	87,714	48	Apr.	587,540	659,960	27,889	48,705
Aug.	72,218	76,070	0	May	858,273	964,963	11,753	14,926
4th Qtr.	455,471	479,218	118	4th Qtr.	2,036,398	2,315,206	60,899	86,966
Total	1,497,550	1,735,276	1,295	Total	12,701,236	15,778,021	513,089	636,459
1976/77:				1976/77				
Sept.	136,434	138,356	0	June	2,009,994	2,236,414	15,553	34,491
Oct.	83,151	94,029	0	July	637,977	857,761	64,577	67,191
Nov.	266,733	314,577	0	Aug.	1,245,395	1,467,011	4,525	12,429
1st Qtr.	486,318	546,962	0	1st Qtr.	3,893,366	4,561,186	84,655	114,111
Dec.	177,310	190,508	0	Sept.	798,349	1,046,108	21,936	29,934
Jan.	70,481	96,489	0	Oct.	4,818	141,142	14,876	32,860
Feb.	145,926	157,106	0	Nov.	196,948	318,012	14,817	20,315
2nd Qtr.	393,717	444,103	0	2nd Qtr.	1,000,115	1,505,262	51,629	83,109
Mar.	7,498	27,487	0	Dec.	404,334	538,177	78,462	89,895
Apr.	87,050	99,854	188	Jan.	946,916	1,102,450	120,235	132,798
May	438,329	443,685	95	Feb.	493,961	624,453	197,133	206,396
3rd Qtr.	532,877	571,026	283	3rd Qtr.	1,845,211	2,265,080	395,830	429,089
June	312,460	313,099	0	Mar.	738,623	902,746	284,257	300,785
July	185,817	186,291	0	Apr.	632,074	833,943	218,521	232,344
Aug.	519,655	520,236	0	May	498,445	802,958	330,055	336,989
4th Qtr.	1,017,932	1,019,626	0	4th Qtr.	1,869,142	2,539,647	832,833	870,118
Total	2,430,844	2,581,717	283	Total	8,607,834	10,871,175	1,364,947	1,496,427
1977/78:				1977/78				
Sept.	97,920	100,788	0	June	2,368,640	2,764,183	740,077	750,825
Oct.	482,174	505,782	0	July	412,910	853,478	129,463	151,280
Nov.	60,677	97,097	0	Aug.	569,880	1,019,874	65,239	78,558
1st Qtr.	640,771	703,667	0	1st Qtr.	3,351,430	4,637,535	934,779	980,663
Dec.	75,411	96,626	0	Sept.	243,812	473,873	122,581	137,312
Jan.	158,735	183,155	0	Oct.	28,317	239,542	99,251	111,619
Feb.	421,573	436,495	0	Nov.	482,820	650,891	168,296	175,801
2nd Qtr.	655,719	716,276	0	2nd Qtr.	754,949	1,364,306	390,128	424,732
Mar.	236,524	283,308	0	Dec.	839,755	938,042	175,350	187,530
Apr.	156,639	168,200	196	Jan.	712,903	913,625	108,038	116,324
May	133,843	145,851	24	Feb.	250,900	431,801	143,408	161,229
3rd Qtr.	527,006	597,359	220	3rd Qtr.	1,803,558	2,283,468	426,796	465,083
June	83,059	90,792	0	Mar.	241,366	457,093	118,171	129,606
July	188,531	194,522	10,231	Apr.	69,881	225,945	121,018	135,023
Aug.	302,798	304,310	11,101	May	221,767	505,948	95,055	110,756
4th Qtr.	574,388	589,624	21,332	4th Qtr.	533,014	1,188,986	334,244	375,385
Total	2,397,884	2,606,926	21,552	Total	6,442,951	9,474,295	2,085,947	2,245,863

See footnotes at end of table.

Continued--

Appendix table 18--Corn, sorghum, barley, and oats imports, 1975/76 to date 1/--Continued

Year and month	Corn		Sorghu	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1978/79:				1978/79				
Sept.	80,998	82,019	0	June	276,896	532,672	127,847	137,213
Oct.	11,397	21,149	0	July	986,064	1,418,338	37,885	47,913
Nov.	42,821	54,334	0	Aug.	234,024	548,660	23,378	32,299
1st Qtr.	135,216	157,502	0	1st Qtr.	1,496,984	2,499,670	189,110	217,425
Dec.	59,339	72,321	0	Sept.	40,043	255,486	32,927	44,496
Jan.	243,704	260,550	0	Oct.	110,994	429,614	25,408	32,598
Feb.	1,039	50,782	0	Nov.	825,557	1,049,732	25,151	34,041
2nd Qtr.	304,082	383,653	0	2nd Qtr.	976,594	1,734,832	83,486	111,135
Mar.	103,947	116,395	0	Dec.	971,916	1,281,034	39,165	51,008
Apr.	69,498	76,740	0	Jan.	797,988	1,134,539	60,200	71,444
May	122,910	130,212	1,890	Feb.	384,319	650,039	57,616	67,459
3rd Qtr.	296,355	323,347	1,890	3rd Qtr.	2,154,223	3,065,612	156,981	189,911
June	47,909	49,367	0	Mar.	899,926	1,274,511	80,120	87,131
July	278,155	280,696	0	Apr.	447,587	845,535	67,809	74,249
Aug.	90,816	94,387	0	May	737,200	1,117,318	47,728	67,072
4th Qtr.	416,880	424,450	0	4th Qtr.	2,084,713	3,237,364	195,657	228,452
Total	1,152,533	1,288,952	1,890	Total	6,712,514	10,537,478	625,234	746,923
1979/80:				1979/80:				
Sept.	67,261	70,547	17	June	508,172	956,165	66,902	75,963
Oct.	60,135	91,870	33	July	1,053,302	1,401,581	32,700	53,911
Nov.	87,671	96,674	0	Aug.	184,716	853,786	103,339	112,444
1st Qtr.	215,067	259,091	50	1st Qtr.	1,746,190	3,211,532	202,941	242,318
Dec.	44,485	67,828	0	Sept.	146,405	480,704	81,605	103,334
Jan.	49,000	64,908	0	Oct.	481,803	755,918	45,908	61,834
Feb.	72,887	93,576	0	Nov.	511,546	736,945	54,732	57,802
2nd Qtr.	166,372	226,312	0	2nd Qtr.	1,139,754	1,973,567	182,245	222,970
Mar.	121,254	129,375	0	Dec.	1,046,665	1,322,822	50,978	64,850
Apr.	4,185	15,705	1,802	Jan.	702,837	977,405	48,718	56,241
May	74,202	84,856	0	Feb.	245,660	680,313	46,740	58,823
3rd Qtr.	199,641	229,936	1,802	3rd Qtr.	1,995,162	2,980,540	146,436	179,914
June	11,404	16,394	0	Mar.	958,739	1,536,331	68,318	91,744
July	20,221	26,082	394	Apr.	174,456	658,919	68,142	88,969
Aug.	108,026	112,586	0	May	1,151,699	1,476,137	108,118	122,956
4th Qtr.	139,651	155,062	394	4th Qtr.	2,284,894	3,671,387	244,578	303,669
Total	720,731	870,401	2,246	Total	7,166,000	11,837,026	776,200	948,871
1980/81:				1980/81:				
Sept.	174,580	251,525	17	June	620,387	1,007,100	208,364	217,350
Oct.	62,982	91,027	0	July	475,033	897,820	99,739	117,566
Nov.	54,852	119,771	7,143	Aug.	198,458	613,721	138,041	150,113
1st Qtr.	292,414	462,323	7,160	1st Qtr.	1,293,878	2,518,641	446,144	485,029
Dec.	815	14,058	0	Sept.	576,818	994,834	103,180	114,358
Jan.	981	41,791	0	Oct.	418,748	716,432	78,330	92,721
Feb.	1,471	117,558	1,429	Nov.	272,608	649,066	37,899	44,456
2nd Qtr.	3,267	173,407	1,429	2nd Qtr.	1,268,174	2,360,332	219,409	251,535
Mar.	43,305	114,750	1,125	Dec.	616,398	971,698	68,867	73,711
Apr.	1,810	41,432	16	Jan.	405,615	753,860	48,185	83,723
May	503	56,863	0	Feb.	502,852	786,383	72,464	90,183
3rd Qtr.	45,618	213,045	1,141	3rd Qtr.	1,524,865	2,511,941	189,516	247,617
June	407,509	418,284	39	Mar.	687,319	1,176,303	67,501	75,690
July	48,187	60,912	0	Apr.	388,038	662,947	100,117	105,706
Aug.	51,275	57,174	16	May	702,898	975,666	109,205	128,927
4th Qtr.	506,971	536,370	55	4th Qtr.	1,778,255	2,814,916	276,823	310,323
Total	848,270	1,385,145	9,785	Total	5,865,172	10,205,830	1,131,892	1,294,504

See footnotes at end of table.

Continued--

Appendix table 18--Corn, sorghum, barley, and oats imports, 1975/76 to date 1/--Continued

Year and month	Corn		Sorghu	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1981/82:				1981/82:				
Sept.	47,232	50,064	0	June	610,314	807,773	100,775	117,252
Oct.	54,527	85,484	0	July	338,217	528,962	65,137	86,099
Nov.	8,426	71,390	0	Aug.	160,069	369,781	53,075	60,145
1st Qtr.	110,185	206,938	0	1st Qtr.	1,108,600	1,706,516	218,987	263,496
Dec.	158,826	231,084	167	Sept.	318,906	648,411	76,882	83,979
Jan.	321	32,702	0	Oct.	181,471	437,924	60,349	69,425
Feb.	118	105,527	15	Nov.	647,471	896,666	70,277	81,798
2nd Qtr.	159,265	369,313	182	2nd Qtr.	1,147,848	1,983,001	207,508	235,202
Mar.	1,063	116,202	199	Dec.	892,812	1,086,699	60,553	70,180
Apr.	4,900	20,978	0	Jan.	780,039	989,703	30,724	43,110
May	34,328	54,210	106	Feb.	844,258	1,052,933	31,463	40,939
3rd Qtr.	40,291	191,390	305	3rd Qtr.	2,517,109	3,129,335	122,740	154,229
June	217,319	249,153	6,389	Mar.	487,592	690,770	41,105	67,490
July	29,526	45,153	0	Apr.	983,354	1,276,341	336,288	344,204
Aug.	89	6,720	9,873	May	631,815	824,440	557,422	572,517
4th Qtr.	246,934	301,026	16,262	4th Qtr.	2,102,761	2,791,551	934,815	984,211
Total	556,675	1,068,667	16,749	Total	6,876,318	9,610,403	1,484,050	1,637,138
1982/83:				1982/83:				
Sept.	57,841	83,885	5,440	June	1,706,202	1,890,855	173,860	192,633
Oct.	36,755	63,827	38,834	July	1,602,675	1,808,382	311,531	322,304
Nov.	153,521	184,648	3,969	Aug.	578,914	869,862	157,066	186,560
1st Qtr.	248,117	332,360	48,243	1st Qtr.	3,887,791	4,569,099	642,457	701,497
Dec.	52,888	81,987	2,673	Sept.	271,038	520,052	42,950	67,955
Jan.	5,346	25,718	0	Oct.	118,788	375,818	41,249	48,694
Feb.	383	20,320	0	Nov.	901,290	1,166,105	69,839	82,915
2nd Qtr.	58,617	128,025	2,673	2nd Qtr.	1,291,116	2,061,975	154,038	199,564
Mar.	52,592	116,099	24	Dec.	210,376	359,493	80,919	101,512
Apr.	4,472	34,644	0	Jan.	411,890	602,902	327,193	343,005
May	29,196	49,197	0	Feb.	573,023	702,910	346,452	361,453
3rd Qtr.	86,260	199,940	24	3rd Qtr.	1,195,289	1,665,305	754,564	805,970
June	72,972	79,436	29	Mar.	695,950	855,026	688,400	846,946
July	1,489	8,400	0	Apr.	748,297	869,229	441,625	461,343
Aug.	21,394	29,572	0	May	532,160	644,747	830,870	849,348
4th Qtr.	95,855	117,408	29	4th Qtr.	1,976,407	2,369,002	1,960,895	2,157,637
Total	488,849	777,733	50,969	Total	8,350,603	10,665,381	3,511,954	3,864,668
1983/84:				1983/84:				
Sept.	187,378	224,236	55	June	984,175	1,076,280	1,352,013	1,374,965
Oct.	74,362	103,908	0	July	697,624	811,948	4,040,293	4,067,425
Nov.	135,991	181,386	0	Aug.	613,639	872,632	3,759,037	3,776,309
1st Qtr.	397,731	509,530	55	1st Qtr.	2,295,438	2,760,860	9,151,343	9,218,699
Dec.	10,484	58,924	0	Sept.	406,495	681,755	2,494,421	2,511,830
Jan.	301,147	361,028	0	Oct.	152,380	432,289	2,066,649	2,107,494
Feb.	238	164,021	0	Nov.	30,350	257,914	1,517,183	1,551,431
2nd Qtr.	311,869	583,973	0	2nd Qtr.	589,225	1,371,958	6,078,253	6,170,755
Mar.	55,570	310,958	0	Dec.	636,688	805,125	1,224,336	1,262,960
Apr.	421,092	460,456	0	Jan.	305,982	470,695	1,379,602	1,388,291
May	9,899	205,026	0	Feb.	105,250	246,267	3,637,066	3,665,607
3rd Qtr.	486,561	976,440	0	3rd Qtr.	1,047,920	1,522,087	6,241,004	6,316,858
June	134,071	176,922	9	Mar.	292,509	445,810	5,560,632	5,580,005
July	368,517	372,316	141,963	Apr.	418,999	581,084	1,940,376	1,958,505
Aug.	8,062	15,913	0	May	401,076	404,011	943,825	961,346
4th Qtr.	510,650	565,151	141,972	4th Qtr.	1,112,584	1,430,905	8,444,833	8,499,856
Total	1,706,811	2,635,094	142,027	Total	5,045,167	7,085,810	29,915,433	30,206,168

See footnotes at end of table.

Continued--

Appendix table 18--Corn, sorghum, barley, and oats imports, 1975/76 to date 1/--Continued

Year and month	Corn			Year and month	Barley		Oats	
	Grain only	Total	Sorghu		Grain only	Total	Grain only	Total
	Bushels				Bushels			
1984/85:				1984/85:				
Sept.	116,290	127,399	0	June	920,819	1,054,291	305,312	322,345
Oct.	260,438	317,134	0	July	722,362	883,625	1,469,282	1,490,031
Nov.	345,944	440,702	0	Aug.	1,023,658	1,165,980	217,465	234,276
1st Qtr.	722,672	885,235	0	1st Qtr.	2,666,839	3,103,896	1,992,059	2,046,652
Dec.	41,045	134,862	120,673	Sept.	284,510	466,491	3,771,243	3,786,897
Jan.	41,925	147,551	0	Oct.	276,438	505,461	3,449,893	3,462,452
Feb.	0	81,696	0	Nov.	300,744	591,477	1,485,364	1,494,579
2nd Qtr.	82,970	364,109	120,673	2nd Qtr.	861,692	1,563,429	8,706,500	8,743,928
Mar.	15,777	93,686	0	Dec.	1,640,951	1,899,683	4,119,279	4,138,000
Apr.	9,264	38,751	0	Jan.	358,752	618,802	4,035,973	4,095,972
May	824,177	936,859	0	Feb.	356,654	688,930	4,017,603	4,092,731
3rd Qtr.	849,218	1,069,296	0	3rd Qtr.	2,356,357	3,207,415	12,172,855	12,326,703
June	60,875	944,203	0	Mar.	537,365	905,566	3,857,568	3,900,423
July	1,428	39,177	0	Apr.	939,773	1,166,350	5,170,327	5,257,192
Aug.	15,836	135,868	0	May	60,460	160,312	1,728,469	7,008,343
4th Qtr.	78,139	1,119,248	0	4th Qtr.	1,537,598	2,232,228	10,756,364	16,165,958
Total	1,732,999	3,437,888	120,672	Total	7,422,486	10,106,968	33,627,778	39,283,241
1985/86:				1985/86:				
Sept.	8,086	33,974	0	June	340,425	588,237	1,728,933	1,757,614
Oct.	314,654	350,199	0	July	251,910	478,428	1,889,404	1,931,401
Nov.	540,018	600,046	1,429	Aug.	61,653	345,756	825,818	834,833
1st Qtr.	862,758	984,219	1,429	1st Qtr.	653,988	1,412,421	4,444,155	4,523,848
Dec.	121,966	258,092	0	Sept.	109,312	347,927	1,288,425	1,304,864
Jan.	374,481	483,279	0	Oct.	872,324	1,087,159	1,256,991	1,264,610
Feb.	456,976	540,101	0	Nov.	339,674	591,311	1,672,252	1,678,864
2nd Qtr.	953,423	1,281,472	0	2nd Qtr.	1,321,310	2,026,397	4,217,668	4,248,338
Mar.	369,991	416,011	0	Dec.	592,242	689,112	3,210,457	3,232,191
Apr.	623,207	662,745	630	Jan.	528,661	935,239	3,264,356	3,284,460
May	1,212,047	1,240,983	0	Feb.	1,413,559	1,589,598	2,394,906	2,418,051
3rd Qtr.	2,205,245	2,319,739	630	3rd Qtr.	2,534,462	3,213,949	8,869,719	8,934,702
June	1,765,143	1,774,942	0	Mar.	261,745	443,882	2,336,953	2,366,047
July	2,994,897	3,082,335	797	Apr.	385,235	616,253	3,574,782	3,591,060
Aug.	1,116,694	1,139,076	0	May	1,088,551	1,276,845	3,795,409	3,822,076
4th Qtr.	5,876,734	5,996,353	797	4th Qtr.	1,735,531	2,336,980	9,707,144	9,779,183
Total	9,898,160	10,581,783	2,856	Total	6,245,291	8,989,747	27,238,686	27,486,071
1986/87:				1986/87:				
Sept.	311,213	332,783	6,329	June	1,296,495	1,501,548	5,325,371	5,345,316
Oct.	66,792	107,949	0	July	15,140	223,046	1,841,943	1,868,602
Nov.	333,201	353,750	33	Aug.	19,469	210,558	1,537,423	1,559,704
1st Qtr.	711,206	794,482	6,362	1st Qtr.	1,331,104	1,935,152	8,704,737	8,773,622
Dec.	66,353	131,009	0	Sept.	75,927	307,474	846,095	879,869
Jan.	85,979	134,935	0	Oct.	31,578	207,980	1,262,426	1,292,827
Feb.	14,207	52,622	86	Nov.	926,059	1,193,914	2,695,161	3,342,153
2nd Qtr.	166,539	318,566	86	2nd Qtr.	1,033,564	1,709,368	4,803,682	5,514,849
Mar.	29,812	63,602	0	Dec.	173,536	310,750	1,241,736	1,261,139
Apr.	400,056	428,391	0	Jan.	392,962	681,307	3,981,067	4,020,146
May	19,009	30,652	0	Feb.	625,953	772,737	3,994,932	4,027,553
3rd Qtr.	448,877	522,645	0	3rd Qtr.	1,192,451	1,764,794	9,217,735	9,308,838
June	326,401	339,131	0	Mar.	1,808,103	1,888,079	2,277,619	2,300,061
July	32,223	48,591	197	Apr.	508,133	591,606	3,401,071	3,434,844
Aug.	71,486	471,582	0	May	792,379	849,842	3,951,545	3,988,454
4th Qtr.	430,110	471,582	197	4th Qtr.	3,108,615	3,329,527	9,630,235	9,723,359
Total	1,756,732	2,107,275	6,645	Total	6,665,734	8,738,841	32,356,389	33,320,668

See footnotes at end of table.

Continued--

Appendix table 18--Corn, sorghum, barley, and oats imports, 1975/76 to date 1/--Continued

Year and month	Corn		Sorghu	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1987/88:				1987/88:				
Sept.	130,361	151,725	0	June	683,655	895,759	3,730,421	3,760,272
Oct.	354,333	373,790	24	July	195,998	445,492	1,717,932	1,735,424
Nov.	77,145	101,481	15	Aug.	220,222	434,668	1,541,932	1,582,741
1st Qtr.	561,839	626,996	39	1st Qtr.	1,099,875	1,775,919	6,990,285	7,078,437
Dec.	246,126	298,521	0	Sept.	1,061,243	1,396,437	1,712,779	1,744,204
Jan.	126,012	167,032	0	Oct.	926,329	1,222,581	1,270,484	1,372,822
Feb.	332,569	388,773	19	Nov.	876,498	1,209,701	5,106,952	5,148,944
2nd Qtr.	704,707	854,326	19	2nd Qtr.	2,864,070	3,828,719	8,090,215	8,265,970
Mar.	593,592	683,203	12	Dec.	1,146,248	1,384,778	2,537,116	2,566,987
Apr.	662,637	739,543	50	Jan.	1,846,528	2,038,574	4,086,315	4,154,507
May	113,606	140,762	0	Feb.	1,318,218	1,605,421	9,164,122	9,210,252
3rd Qtr.	1,369,835	1,563,508	62	3rd Qtr.	4,310,994	5,028,773	15,787,553	15,931,746
June	347,181	376,601	0	Mar.	1,163,560	1,280,709	6,426,933	6,482,646
July	257,479	275,042	0	Apr.	986,537	1,063,805	3,701,098	3,737,802
Aug.	169,701	207,314	7,229	May	876,452	961,089	4,721,106	4,756,988
4th Qtr.	774,361	858,957	7,229	4th Qtr.	3,026,549	3,305,603	14,849,137	14,977,436
Total	3,410,742	3,903,787	7,349	Total	11,301,488	13,939,014	45,717,190	46,253,589
1988/89:				1988/89:				
Sept.	148,437	177,913	0	June	1,596,106	1,700,185	5,680,015	5,772,502
Oct.	296,701	308,058	3,673	July	930,207	1,029,127	2,276,583	2,365,501
Nov.	180,789	233,514	0	Aug.	317,223	417,363	4,298,356	4,485,006
1st Qtr.	625,927	719,485	3,673	1st Qtr.	2,843,536	3,146,675	12,254,954	12,623,009
Dec.	106,151	173,241	0	Sept.	240,729	365,319	2,059,442	2,367,645
Jan.	307,023	723,699	0	Oct.	402,245	555,196	3,995,388	4,239,340
Feb.	178,260	591,385	15,130	Nov.	1,523,621	1,651,752	5,834,991	6,184,617
2nd Qtr.	591,434	1,488,325	15,130	2nd Qtr.	2,166,595	2,572,267	11,889,821	12,791,602
Mar.	420,381	742,935	0	Dec.	490,420	578,085	4,696,591	5,153,441
Apr.	633,060	845,387	5	Jan.	729,443	838,489	6,100,483	6,906,243
May	162,021	356,329	0	Feb.	1,627,551	1,720,819	9,313,487	10,172,629
3rd Qtr.	1,215,462	1,944,651	5	3rd Qtr.	2,847,414	3,137,393	20,110,561	22,232,313
June	33,363	212,637	14	Mar.	762,924	851,359	7,169,256	8,042,377
July	223,459	382,968	0	Apr.	753,742	857,654	4,750,564	5,429,227
Aug.	93,469	348,056	0	May	1,136,714	1,239,385	6,723,912	7,307,316
4th Qtr.	350,291	943,661	14	4th Qtr.	2,653,380	2,948,398	18,643,732	20,778,920
Total	2,783,114	5,096,122	18,822	Total	10,510,925	11,804,733	62,899,068	68,425,844
1989/90:				1989/90:				
Sept.	38,078	278,865	0	June	1,649,125	1,745,195	3,146,832	3,789,238
Oct.	307,119	553,242	0	July	571,185	661,468	6,440,929	6,730,677
Nov.	297,019	545,010	0	Aug.	1,356,499	1,456,086	7,372,277	7,823,880
1st Qtr.	642,216	1,377,117	0	1st Qtr.	3,576,809	3,862,749	16,960,038	18,343,795
Dec.	98,067	284,277	0	Sept.	263,515	360,996	5,871,691	6,236,194
Jan.	247,828	427,823	0	Oct.	204,334	283,661	4,460,867	4,779,170
Feb.	92,762	248,372	0	Nov.	1,517,596	1,674,049	7,146,334	7,452,067
2nd Qtr.	438,657	960,472	0	2nd Qtr.	1,985,445	2,318,706	17,478,892	18,467,431
Mar.	182,222	320,108	74,979	Dec.	1,078,994	1,235,670	6,581,569	6,720,624
Apr.	162,070	340,157	826	Jan.	823,485	951,218	4,913,651	5,106,850
May	275,032	540,454	42,236	Feb.	1,396,491	1,556,043	4,198,054	4,343,569
3rd Qtr.	619,324	1,200,719	118,041	3rd Qtr.	3,298,970	3,742,931	15,693,274	16,171,043
June	33,491	302,083	23,864	Mar.	1,412,309	1,513,346	3,990,713	4,076,976
July	135,597	409,747	75,398	Apr.	1,333,963	1,417,784	8,952,950	9,062,504
Aug.	32,720	259,866	8,410	May	1,468,205	1,585,804	3,318,193	3,416,974
4th Qtr.	201,808	971,696	107,672	4th Qtr.	4,214,477	4,516,934	16,261,856	16,556,454
Total	1,902,005	4,510,004	225,713	Total	13,075,701	14,441,320	66,394,060	69,538,723

See footnotes at end of table.

Continued--

Appendix table 18--Corn, sorghum, barley, and oats imports, 1975/76 to date 1/--Continued

Year and month	Corn		Sorghu	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1990/91:				1990/91:				
Sept.	29,118	260,345	5,551	June	603,614	691,947	6,675,422	6,766,369
Oct.	172,220	496,429	0	July	309,116	547,246	5,841,249	5,908,451
Nov.	683,773	920,527	60	Aug.	117,460	357,140	4,998,143	5,090,611
1st Qtr.	885,111	1,677,301	5,611	1st Qtr.	1,030,190	1,596,333	17,514,814	17,765,432
Dec.	90,489	263,269	0	Sept.	117,510	200,053	2,240,097	2,358,047
Jan.	100,811	305,895	0	Oct.	293,888	485,842	4,464,410	4,636,239
Feb.	83,751	264,812	0	Nov.	839,438	1,014,543	4,970,603	5,078,808
2nd Qtr.	275,051	833,976	0	2nd Qtr.	1,250,836	1,700,438	11,675,110	12,073,094
Mar.	80,937	251,187	60,462	Dec.	1,288,335	1,569,231	6,027,830	6,118,040
Apr.	214,595	370,354	167	Jan.	1,194,977	1,306,682	2,543,485	2,642,746
May	487,548	647,502	12	Feb.	1,723,635	1,836,340	9,675,744	9,822,449
3rd Qtr.	783,080	1,269,043	60,641	3rd Qtr.	4,206,947	4,712,253	18,247,059	18,583,235
June	155,046	327,612	0	Mar.	2,248,034	2,423,555	4,618,596	4,763,254
July	423,345	640,317	679	Apr.	3,369,631	3,401,987	3,767,262	3,887,601
Aug.	893,816	1,121,419	1,319	May	1,373,891	1,581,999	7,585,984	7,719,294
4th Qtr.	1,472,207	2,089,348	1,998	4th Qtr.	6,991,556	7,407,541	15,971,842	16,370,149
Total	3,415,449	5,869,668	68,250	Total	13,479,529	15,416,565	63,408,825	64,791,910
1991/92:				1991/92:				
Sept.	1,100,354	2,099,166	0	June	4,575,522	4,778,394	5,759,634	5,844,622
Oct.	2,251,767	3,433,843	0	July	1,743,996	1,919,668	7,175,340	7,240,484
Nov.	3,128,935	3,991,138	0	Aug.	1,120,846	1,279,512	8,780,737	8,871,528
1st Qtr.	6,481,056	9,524,147	0	1st Qtr.	7,440,364	7,977,574	21,715,711	21,956,634
Dec.	1,420,521	2,368,422	118	Sept.	567,099	652,111	4,958,443	5,041,886
Jan.	1,404,407	2,572,915	0	Oct.	1,232,489	1,313,834	9,129,115	9,219,462
Feb.	1,579,933	2,826,668	0	Nov.	1,657,843	1,741,481	3,209,866	3,325,064
2nd Qtr.	4,404,861	7,768,005	118	2nd Qtr.	3,457,431	3,707,426	17,297,424	17,586,412
Mar.	1,962,895	3,380,386	393	Dec.	1,818,152	2,009,904	4,236,846	4,411,775
Apr.	2,193,891	3,361,470	0	Jan.	2,349,600	2,483,012	5,997,604	6,120,696
May	1,247,071	2,395,941	225	Feb.	2,286,473	2,460,709	7,414,705	7,525,443
3rd Qtr.	5,403,857	9,137,797	618	3rd Qtr.	6,454,225	6,953,625	17,649,155	18,057,914
June	1,380,817	2,692,486	4,565	Mar.	2,525,374	2,676,242	6,625,725	6,729,380
July	1,390,021	2,499,421	1,567	Apr.	2,288,155	2,422,134	8,797,008	8,894,410
Aug.	576,112	1,777,124	394	May	2,356,369	2,453,301	2,679,647	2,788,631
4th Qtr.	3,346,950	6,969,031	6,526	4th Qtr.	7,169,898	7,551,677	18,102,380	18,412,421
Total	19,636,724	33,398,980	7,262	Total	24,521,918	26,190,302	74,764,670	76,013,381
1992/93:				1992/93:				
Sept.	221,471	1,553,822	0	June	2,159,260	2,244,926	7,323,161	7,515,000
Oct.	296,504	1,510,619	0	July	3,279,771	3,467,803	4,075,120	4,197,542
Nov.	739,778	1,843,315	0	Aug.	1,117,761	1,210,126	3,740,291	3,898,321
1st Qtr.	1,257,753	4,907,756	0	1st Qtr.	6,556,792	6,922,855	15,138,572	15,610,863
Dec.	541,980	1,818,086	0	Sept.	566,767	676,418	2,452,932	2,632,483
Jan.	241,471	1,522,523	0	Oct.	499,308	594,740	3,920,278	4,104,556
Feb.	255,908	1,280,493	4,650	Nov.	467,239	565,914	5,525,416	5,733,071
2nd Qtr.	1,039,359	4,621,102	4,650	2nd Qtr.	1,533,314	1,837,072	11,898,626	12,470,110
Mar.	629,207	2,075,358	0	Dec.	359,479	465,468	5,190,977	5,359,648
Apr.	555,199	2,108,923	148	Jan.	611,251	750,665	2,661,061	2,875,420
May	814,925	2,048,094	876	Feb.	476,363	647,058	2,845,670	3,107,494
3rd Qtr.	1,999,331	6,232,374	1,024	3rd Qtr.	1,447,093	1,863,191	10,697,708	11,342,562
June	691,647	1,927,256	6,736	Mar.	321,428	466,275	1,979,249	2,238,823
July	978,610	2,242,449	0	Apr.	548,083	705,239	7,656,387	7,939,956
Aug.	1,124,329	2,532,369	0	May	997,906	1,088,029	7,607,251	7,818,451
4th Qtr.	2,794,586	6,702,074	6,736	4th Qtr.	1,867,417	2,259,543	17,242,887	17,997,230
Total	7,091,029	22,463,306	12,410	Total	11,404,616	12,882,661	54,977,793	57,420,765

See footnotes at end of table.

Continued--

Appendix table 18--Corn, sorghum, barley, and oats imports, 1975/76 to date 1/--Continued

Year and month	Corn		Sorghu	Year and month	Barley		Oats	
	Grain only	Total			Grain only	Total	Grain only	Total
	Bushels				Bushels			
1993/94:				1993/94:				
Sept.	626,777	2,048,980	0	June	951,500	1,133,778	8,118,931	8,329,893
Oct.	1,022,455	2,306,477	0	July	751,986	1,104,042	5,207,841	5,471,101
Nov.	3,559,780	4,807,204	0	Aug.	1,467,158	1,868,049	3,492,138	3,724,005
1st Qtr.	5,209,012	9,162,661	0	1st Qtr.	3,170,644	4,105,869	16,818,910	17,524,999
Dec.	3,358,367	4,746,265	2,859	Sept.	1,495,435	1,919,584	9,336,793	9,728,511
Jan.	1,942,517	3,287,367	14	Oct.	3,536,261	3,967,197	11,312,576	11,783,389
Feb.	2,652,844	3,778,840	3,819	Nov.	5,737,065	5,938,311	14,228,011	14,705,412
2nd Qtr.	7,953,728	11,812,472	6,692	2nd Qtr.	10,768,761	11,825,092	34,877,380	36,217,312
Mar.	3,127,232	4,496,118	0	Dec.	9,548,547	9,837,874	15,145,835	15,521,516
Apr.	1,745,743	2,952,344	0	Jan.	6,305,201	6,456,667	8,356,046	8,656,598
May	1,401,306	2,477,028	94	Feb.	7,828,521	8,094,532	7,868,091	8,229,651
3rd Qtr.	6,274,281	9,925,490	94	3rd Qtr.	23,682,269	24,389,073	31,369,972	32,407,765
June	639,210	1,760,985	866	Mar.	9,182,180	9,551,416	5,834,471	6,258,538
July	363,591	1,400,676	118	Apr.	13,199,853	13,538,720	6,966,622	7,298,970
Aug.	375,230	1,420,154	0	May	11,471,981	11,965,254	10,954,717	11,339,625
4th Qtr.	1,378,031	4,581,815	984	4rd Qtr.	33,854,014	35,055,390	23,755,810	24,897,133
Total	20,815,052	35,482,438	7,770	Total	71,475,689	75,375,425	106,822,073	111,047,209
1994/95:				1994/95:				
Sept.	232,309	1,429,200	0	June	11,000,515	11,489,434	8,651,819	9,149,458
Oct.	628,235	1,552,074	0	July	6,945,978	7,525,251	6,060,150	6,673,769
Nov.	1,199,480	2,129,075	0	Aug.	6,177,541	6,529,860	5,683,580	6,514,150
1st Qtr.	2,060,024	5,110,349	0	1st Qtr.	24,124,034	25,544,545	20,395,549	22,337,377
Dec.	1,346,024	2,187,915	0	Sept.	3,399,898	3,659,184	10,512,201	11,109,632
Jan.	1,216,978	2,207,251	0	Oct.	4,200,472	4,521,813	11,739,351	12,425,795
Feb.	1,176,476	1,832,583	0	Nov.	6,237,816	6,519,407	11,782,770	12,380,144
2nd Qtr.	3,739,478	6,227,749	0	2nd Qtr.	13,838,186	14,700,404	34,034,321	35,915,571
Mar.	1,342,250	2,113,275	186	Dec.	4,726,872	5,006,148	10,568,956	11,099,411
Apr.	1,135,248	1,924,962	3,211	Jan.	5,939,742	6,399,254	9,734,072	10,240,009
May	525,646	1,359,179	964	Feb.	2,835,359	3,223,742	2,561,486	3,084,892
3rd Qtr.	3,003,145	5,397,416	4,362	3rd Qtr.	13,501,973	14,629,145	22,864,514	24,424,312
June	336,586	1,037,123	0	Mar.	3,664,527	3,969,689	4,950,703	5,348,317
July	183,055	880,078	2,568	Apr.	6,035,110	6,406,987	5,356,669	5,712,256
Aug.	234,511	1,247,580	433	May	4,700,417	5,046,947	5,582,662	5,964,851
4th Qtr.	754,152	3,164,781	3,001	4rd Qtr.	14,400,055	15,423,624	15,890,034	17,025,424
Total	9,556,799	19,900,295	7,363	Total	65,864,248	70,297,718	93,184,417	99,702,684
1995/96:				1995/96:				
Sept.	318,102	1,313,631	591	June	4,656,256	5,021,123	13,161,359	13,506,826
Oct.				July	5,124,413	5,391,807	9,266,776	9,646,447
Nov.				Aug.	2,106,904	2,496,051	5,339,551	5,710,224
1st Qtr.				1st Qtr.	11,887,573	12,908,981	27,767,686	28,863,497
Dec.				Sept.	1,571,084	1,953,787	7,287,479	7,673,428

1/ Corn includes grain only (yellow dent corn, other), seed, and cornmeal. Sorghum is grain only. Barley includes grain only barley for malting, other), pearl barley, milled and malting. Oats include grain (hulled or unhulled), unhulled oats fit and unfit for human consumption, and oatmeal fit for human consumption.

Source: Bureau of the Census, U.S. Department of Commerce.

Appendix table 19--U.S. exports by leading destinations, 1989/90-1994/95 1/

Country/region	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95
			1,000 metric tons			
Corn:						
Japan	14,166	13,378	13,411	14,138	12,322	15,849
S. Korea	5,663	2,161	1,558	991	508	8,005
Taiwan	5,083	4,939	4,955	5,333	5,077	6,027
China	442	0	0	0	0	3,240
Mexico	4,826	2,016	915	506	1,468	2,985
EU-12	3,779	2,974	1,571	1,378	1,765	2,836
Egypt	1,145	1,683	1,067	1,397	1,553	2,569
Algeria	1,214	1,226	1,008	1,076	1,176	1,000
Venezuela	415	448	534	718	809	884
FSU	16,396	8,289	7,270	4,721	2,909	140
Others	6,962	6,613	7,919	11,892	6,061	11,683
Total	60,091	43,726	40,208	42,150	33,649	55,218
Sorghum:						
Mexico	3,009	2,981	4,881	4,147	2,972	2,557
Japan	3,225	1,949	1,669	1,922	1,640	2,050
EU-12	233	199	175	190	172	303
Others	1,161	739	505	619	261	705
Total	7,628	5,868	7,230	6,878	5,044	5,615
Barley:						
Israel	147	110	320	263	335	468
Algeria	124	103	92	115	222	214
Saudi Arabia	532	1,147	1,108	579	344	203
Others	1,027	381	538	791	533	507
Total	1,830	1,741	2,057	1,748	1,433	1,392

1/ September-August for corn and sorghum; June-May for barley.

Source: Bureau of the Census, U.S. Department of Commerce.

Appendix table 20--U.S. white corn exports by destination, 1989/90-1994/95 1/

Country	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95
			1,000 metric tons			
Venezuela	0	0	0	177	147	57
Mexico	37	46	20	5	362	324
Japan	40	36	53	82	31	28
South Africa	0	0	100	150	0	144
Others	5	7	317	92	136	49
Total	82	90	490	506	676	602

1/ Based on inspection data. September-August year.

Source: Grain and Feed Market News, AMS

Appendix table 21--Feed grains and grain products used in the production of alcohol, distilled spirits, and beer, by month, 1975 to date 1/ 2/

Year	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Total
						1 ,000 bushels							
						Corn and corn products							
Distilled spirits and alcohol:													
1975	1,621	2,161	1,963	1,688	1,554	1,316	1,985	2,333	1,974	1,957	1,292	1,250	21,092
1976	1,511	2,072	1,632	1,274	1,464	1,607	2,022	2,004	1,959	1,756	1,416	1,613	20,330
1977	1,884	1,705	1,444	1,459	1,451	1,495	1,628	1,912	1,995	1,746	750	1,624	19,094
1978	1,682	1,962	2,121	2,121	1,849	1,928	2,168	2,274	2,399	2,217	907	1,539	23,166
1979	1,920	2,378	2,501	1,696	2,149	2,174	2,826	2,795	2,738	2,153	910	1,565	25,803
1980	1,737	2,110	1,836	1,903	2,441	2,297	2,949	2,775	2,234	1,802	1,593	2,055	25,730
1981	2,240	2,621	2,066	2,550	2,433	2,869	4,024	3,630	3,369	3,261	4,075	3,528	36,666
1982	4,829	6,291	6,007	6,443	6,188	5,654	6,029	4,584	5,565	5,955	5,135	4,985	67,665
1983	3,898	3,892	3,599	3,446	3,690	3,800	4,261	4,238	3,902	3,091	2,571	3,035	43,422
1984	3,532	5,395	5,299	5,150	5,294	5,262	6,033	5,403	4,568	5,950	6,385	5,640	63,911
1985	5,691	5,997	2,927	2,071	2,243	2,162	2,788	3,114	4,679	4,571	3,816	3,989	44,048
1986	4,501	4,994	4,568	4,797	4,618	4,376	4,775	4,536	4,756	4,614	4,334	4,288	55,158
1987	4,481	4,522	3,721	3,917	3,907	3,862	5,010	4,443	4,530	4,199	3,526	3,550	49,669
1988	3,932	4,798	4,072	4,510	5,595	5,272	8,397	7,632	9,222	8,369	7,642	8,524	77,965
1989	9,603	10,839	10,067	10,263	11,848	11,453	10,988	10,659	9,015	8,358	8,885	9,851	121,830
1990	11,198	10,773	12,113	6,235	6,497	11,465	10,606	10,427	12,280	11,214	3,998	10,313	117,118
1991	11,852	13,038	12,169	13,354	13,992	12,671	13,769	12,834	13,125	12,501	12,987	11,678	153,971
1992	12,009	7,058	6,056	4,754	13,184	13,254	13,992	13,471	11,760	12,374	11,917	10,802	130,631
1993	12,470	13,661	13,358	13,802	13,838	13,123	13,550	5,416	11,827	12,564	11,595	12,363	147,568
1994	13,390	13,974	15,028	7,817	14,189	14,040	8,046	8,252					
Beer:													
1975	4,069	3,598	3,258	3,651	3,435	3,259	4,234	4,503	5,369	5,584	4,875	4,728	50,562
1976	4,118	4,006	3,422	3,381	3,715	3,693	5,526	5,375	5,402	5,275	4,890	4,805	53,609
1977	3,900	3,679	3,644	3,793	3,960	3,904	4,555	4,708	4,788	5,017	4,656	4,892	51,496
1978	3,989	3,907	3,511	3,478	3,529	3,166	4,232	4,149	4,334	4,115	4,366	4,206	46,983
1979	3,547	3,546	3,191	2,991	3,463	3,787	4,049	4,011	4,376	4,335	4,627	4,353	46,275
1980	3,985	3,600	3,359	3,772	3,070	3,576	3,965	4,262	4,530	4,540	4,693	4,117	47,468
1981	3,586	3,547	2,959	3,102	3,389	3,447	4,015	3,998	4,178	3,677	3,829	3,878	43,606
1982	3,461	3,329	2,910	2,960	3,157	3,128	3,809	3,633	3,884	4,038	4,255	3,787	42,350
1983	3,421	3,127	2,857	2,362	3,180	3,408	4,049	4,234	4,169	3,963	3,994	3,569	42,332
1984	2,829	3,327	2,673	2,397	2,889	2,985	3,314	3,923	4,240	4,078	3,595	3,410	39,661
1985	3,220	3,259	2,649	2,498	3,191	3,157	3,469	3,929	4,120	3,838	3,770	3,110	40,210
1986	2,759	2,862	2,419	2,411	2,777	2,858	3,164	3,073	3,199	3,178	3,049	2,780	34,529
1987	2,734	2,362	2,213	2,103	2,620	2,671	2,948	3,384	3,258	3,212	2,714	2,672	32,890
1988	2,318	2,434	2,167	1,919	2,380	2,541	2,893	2,713	2,951	2,986	2,925	3,096	31,321
1989	2,381	2,451	2,109	2,120	2,661	2,666	3,022	2,971	3,160	3,228	3,053	3,091	32,913
1990	2,553	2,751	2,529	2,145	2,633	2,675	2,774	2,908	2,992	3,252	3,378	3,294	33,882
1991	2,587	2,830	2,310	2,180	2,488	2,777	2,928	3,188	3,128	3,242	3,163	2,824	33,644
1992	2,515	2,624	2,495	2,403	2,535	2,797	3,158	3,035	3,274	3,358	2,777	2,834	33,806
1993	2,704	2,566	2,514	2,222	2,566	2,381	3,159	3,145	3,237	4,735	3,123	3,029	35,379
1994	2,192	2,444	2,265	2,274	2,481	2,958	2,853	2,728					
Total distilled spirits and beer:													
1975	5,690	5,759	5,221	5,339	4,989	4,575	6,219	6,836	7,342	7,540	6,167	5,977	71,654
1976	5,629	6,078	5,053	4,655	5,180	5,299	7,549	7,379	7,361	7,031	6,306	6,419	73,939
1977	5,784	5,384	5,088	5,252	5,412	5,399	6,183	6,620	6,783	6,763	5,405	6,516	70,589
1978	5,671	5,869	5,632	5,599	5,378	5,095	6,400	6,423	6,733	6,332	5,273	5,745	70,149
1979	5,466	5,924	5,692	4,687	5,612	5,960	6,875	6,806	7,114	6,488	5,537	5,918	72,078
1980	5,723	5,709	5,195	5,674	5,510	5,873	6,913	7,036	6,764	6,342	6,286	6,172	73,199
1981	5,826	6,168	5,025	5,651	5,823	6,316	8,039	7,628	7,547	6,938	7,904	7,406	80,271
1982	8,290	9,620	8,916	9,403	9,344	8,782	9,838	8,218	9,449	9,993	9,390	8,773	110,015
1983	7,319	7,018	6,456	5,808	6,870	7,208	8,309	8,471	8,071	7,054	6,565	6,604	85,754
1984	6,361	8,722	7,972	7,547	8,183	8,247	9,347	9,327	8,808	10,029	9,980	9,050	103,572
1985	8,911	9,255	5,576	4,569	5,434	5,318	6,257	7,043	8,800	8,410	7,585	7,099	84,257
1986	7,260	7,856	6,987	7,208	7,396	7,234	7,940	7,609	7,956	7,792	7,384	7,068	89,687
1987	7,215	6,884	5,934	6,020	6,526	6,533	7,958	7,827	7,788	7,411	6,240	6,222	82,559
1988	6,249	7,232	6,239	6,429	7,974	7,814	11,290	10,345	12,174	11,354	10,566	11,620	109,286
1989	11,984	13,290	12,177	12,384	14,509	14,118	14,010	13,631	12,175	11,586	11,938	12,942	154,743
1990	13,751	13,524	14,642	8,379	9,130	14,140	13,380	13,335	15,272	14,465	7,376	13,606	151,000
1991	14,439	15,868	14,479	15,534	16,479	15,448	16,697	16,022	16,253	15,743	16,150	14,502	187,614
1992	14,524	9,682	8,551	7,156	15,719	16,052	17,150	16,506	15,034	15,733	14,694	13,635	164,437
1993	15,173	16,227	15,873	16,024	16,403	15,504	16,709	8,561	15,063	17,299	14,717	15,392	182,947
1994	15,583	16,419	17,293	10,091	16,671	16,999	10,899	10,981					
						Grain sorghum							
Distilled spirits and alcohol:													
1975	234	255	195	248	209	147	255	249	397	235	208	223	2,854
1976	252	277	224	201	212	214	200	212	246	237	245	225	2,746
1977	237	294	216	250	289	354	306	294	307	300	386	316	3,550
1978	308	363	369	368	366	320	375	353	347	296	331	349	4,144
1979	349	442	434	418	460	392	368	271	399	320	406	353	4,612
1980	331	380	415	399	199	275	379	340	380	381	357	370	4,206
1981	409	392	410	456	420	406	437	390	415	386	415	371	4,907
1982	269	231	378	389	356	355	241	264	299	347	322	253	3,704
1983	334	409	364	334	279	263	195	246	299	326	306	323	3,678
1984	362	1,311	1,207	1,503	1,085	835	1,117	1,110	943	516	474	523	10,984
1985	1,170	1,499	2,183	2,762	2,875	2,694	2,798	2,056	769	410	1,515	833	21,565
1986	467	315	370	423	519	363	360	471	421	337	444	318	4,808
1987	348	593	610	1,021	1,215	1,289	1,129	1,327	2,506	2,679	2,816	2,350	17,883
1988	2,161	2,816	2,496	2,287	1,670	405	506	465	473	484	772	541	15,075
1989	557	584	571	521	609	577	598	1,399	2,270	748	2,365	1,024	11,823
1990	552	515	464	467	443	459	448	440	435	422	427	461	5,531
1991	452	518	470	392	431	413	505	367	375	334	326	0	4,584
1992	298	395	349	422	381	37	480	399	401	404	368	367	4,300
1993	417	312	429	386	327	319	385	422	453	366	783	369	4,967
1994	367	409	359	394	472	433	389	362					

See footnote at end of table.

Continued--

Appendix table 21--Feed grains and grain products used in the production of alcohol, distilled spirits, and beer, by month, 1975 to date--Continued 1/ 2/

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total
						1,000 bushels							
						Barley and malt							
Distilled spirits and alcohol:													
1975	165	97	97	191	300	335	251	228	212	242	305	270	2,693
1976	263	147	173	209	231	193	212	227	246	331	293	288	2,813
1977	256	198	259	262	265	203	184	202	210	226	250	268	2,782
1978	228	127	240	269	289	321	340	256	294	336	352	363	3,416
1979	302	156	221	264	291	272	287	266	254	333	330	352	3,328
1980	222	119	179	195	241	164	231	320	298	357	345	320	2,992
1981	248	162	189	247	316	297	263	287	302	359	369	284	3,321
1982	234	199	185	456	309	274	225	252	292	315	288	248	3,276
1983	180	94	131	157	167	181	160	211	263	289	252	213	2,300
1984	105	56	110	162	215	240	167	192	194	180	156	182	1,959
1985	153	119	141	148	173	370	122	163	169	185	183	148	2,075
1986	127	95	77	114	140	117	115	161	167	253	225	200	1,792
1987	111	83	100	84	107	107	73	84	105	153	151	155	1,314
1988	123	93	118	152	188	189	180	196	155	240	268	286	2,189
1989	197	129	201	210	147	256	213	255	247	250	458	290	2,853
1990	207	126	174	184	239	241	221	230	239	183	132	107	2,281
1991	166	128	106	205	239	171	249	244	218	219	186	159	2,289
1992	117	61	42	132	177	175	146	178	156	235	221	161	1,802
1993	113	64	97	155	196	198	156	174	198	221	188	169	1,928
1994	123	91	162	201	270	237	207	229	220	258	225		
Beer:													
1975	12,060	12,266	11,173	10,265	9,516	8,798	9,319	9,677	9,536	8,430	10,321	11,419	122,780
1976	11,988	12,297	12,271	10,969	10,304	8,567	8,504	9,244	8,693	11,930	12,164	12,240	129,172
1977	12,671	11,983	11,103	9,594	9,448	9,244	8,901	9,950	9,832	12,355	12,170	12,656	129,907
1978	13,060	13,051	14,021	11,494	12,095	9,849	10,142	10,792	10,523	13,284	12,614	13,327	144,251
1979	13,106	13,293	13,120	11,450	12,014	10,689	10,482	11,100	12,062	12,977	13,241	14,035	147,570
1980	14,190	14,721	14,148	12,861	12,106	10,548	10,616	10,622	11,595	12,858	13,678	14,451	152,394
1981	14,194	14,356	13,466	11,806	11,319	9,852	10,057	12,234	11,232	12,813	13,194	13,260	147,782
1982	13,628	12,430	12,590	11,537	11,251	10,061	9,981	11,112	10,640	12,862	12,724	13,350	142,165
1983	13,427	13,027	13,069	10,778	10,779	9,669	9,030	10,526	10,925	13,008	12,289	13,632	140,159
1984	13,333	13,751	12,456	10,396	10,939	9,383	9,669	11,161	10,357	12,253	13,101	13,390	140,190
1985	12,880	12,597	11,646	10,367	11,040	9,363	9,578	11,568	11,082	11,925	12,967	12,855	137,868
1986	13,472	13,535	11,904	10,862	11,163	9,719	10,387	11,627	11,126	12,739	12,150	12,669	141,352
1987	12,781	12,273	11,905	11,325	11,114	9,055	9,935	11,155	11,468	12,397	12,857	13,126	139,391
1988	13,161	12,914	12,264	10,955	11,123	10,300	9,690	11,388	11,111	12,756	12,530	13,170	141,362
1989	13,241	13,089	13,282	10,979	11,217	9,992	9,713	11,945	11,415	12,928	12,569	13,329	143,698
1990	13,159	13,056	13,508	11,361	12,205	10,194	9,890	11,785	10,920	11,614	12,333	13,161	143,187
1991	13,477	13,697	12,980	11,449	11,803	10,047	9,597	11,113	11,688	12,980	12,354	13,048	144,233
1992	12,921	13,300	12,349	10,780	11,356	10,191	10,071	10,642	11,294	12,175	12,220	13,269	140,568
1993	13,178	13,135	12,409	11,664	10,988	10,786	10,349	11,322	9,995	12,885	13,189	13,866	143,763
1994	14,456	13,417	13,274	11,074	11,404	9,762	9,761	11,866	10,746	12,568	12,179		
Total distilled spirits and beer:													
1975	12,226	12,363	11,270	10,456	9,816	9,133	9,570	9,905	9,748	8,672	10,626	11,688	125,473
1976	12,252	12,444	12,444	11,178	10,535	8,760	8,716	9,471	8,939	12,261	12,457	12,528	131,985
1977	12,927	12,181	11,362	9,856	9,713	9,447	9,086	10,152	10,042	12,581	12,419	12,924	132,689
1978	13,287	13,178	14,261	11,764	12,384	10,170	10,482	11,048	10,818	13,620	12,966	13,689	147,667
1979	13,408	13,449	13,341	11,714	12,305	10,961	10,770	11,366	12,316	13,310	13,571	14,387	150,898
1980	14,412	14,840	14,327	13,056	12,348	10,712	10,847	10,942	11,893	13,215	14,023	14,772	155,386
1981	14,441	14,518	13,654	12,053	11,635	10,149	10,319	12,521	11,534	13,172	13,562	13,543	151,103
1982	13,862	12,629	12,775	11,992	11,560	10,335	10,206	11,365	10,931	13,177	13,012	13,598	145,442
1983	13,607	13,121	13,200	10,935	10,946	9,851	9,191	10,737	11,187	13,297	12,541	13,845	142,459
1984	13,438	13,807	12,567	10,557	11,155	9,623	9,836	11,353	10,550	12,433	13,256	13,572	142,149
1985	13,033	12,717	11,787	10,516	11,213	9,733	9,700	11,731	11,251	12,110	13,150	13,003	139,943
1986	13,599	13,630	11,982	10,976	11,304	9,835	10,502	11,788	11,292	12,993	12,375	12,869	143,144
1987	12,893	12,356	12,005	11,409	11,221	9,162	10,008	11,240	11,573	12,550	13,008	13,280	140,705
1988	13,285	13,007	12,382	11,107	11,311	10,489	9,870	11,584	11,266	12,996	12,798	13,456	143,550
1989	13,438	13,217	13,483	11,189	11,364	10,248	9,926	12,200	11,661	13,178	13,027	13,620	146,551
1990	13,366	13,182	13,682	11,545	12,444	10,435	10,110	12,015	11,159	11,796	12,465	13,267	145,468
1991	13,643	13,824	13,086	11,655	12,043	10,218	9,846	11,356	11,906	13,199	12,540	13,206	146,522
1992	13,038	13,361	12,391	10,912	11,533	10,367	10,217	10,821	11,450	12,411	12,441	13,430	142,369
1993	13,291	13,199	12,505	11,818	11,184	10,983	10,504	11,495	10,193	13,106	13,377	14,034	145,690
1994	14,579	13,509	13,437	11,275	11,674	9,999	9,968	12,094	10,965	12,826	12,405		

1/ Mostly for beverage but also includes some industrial alcohol and may include some fuel alcohol. 2/ Data reflects revisions from 1975 to present.

Source: Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms.

Appendix table 22--Hay: Production, harvested acreage, yield, prices received by farmers, and stocks

Year	Production: Alfalfa hay	Production: Other	Production: Total all hay	Harvested acreage	Yield per harvested acre	Season average price	Stocks: May 1	Stocks: December 1	Supply per RCAU	Disappearance per RCAU
	----1,000 tons------			1,000 acres	Tons	$/ton	---1,000 tons---		------Tons------	
1970	75,573	51,396	126,969	61,467	2.07	26.10	24,056	89,365	1.68	1.43
1971	77,285	51,847	129,132	61,355	2.10	28.10	22,200	87,651	1.66	1.38
1972	78,226	50,339	128,565	59,680	2.15	31.30	25,472	89,445	1.65	1.39
1973	78,805	55,412	134,217	61,828	2.17	41.60	24,311	88,790	1.59	1.34
1974	74,368	52,016	126,384	60,195	2.10	50.90	25,353	93,159	1.45	1.27
1975	78,183	54,214	132,397	61,353	2.16	52.10	18,505	84,687	1.57	1.30
1976	69,960	50,165	120,125	60,377	1.99	60.20	25,541	86,411	1.57	1.36
1977	80,814	51,397	132,211	60,988	2.17	53.70	19,540	77,651	1.73	1.46
1978	87,294	56,523	143,817	62,113	2.32	49.80	24,184	92,136	2.00	1.64
1979	88,110	59,197	147,307	61,279	2.40	59.40	30,108	99,024	2.08	1.69
1980	79,963	50,777	130,740	58,870	2.22	71.00	33,192	107,707	1.87	1.58
1981	83,696	58,824	142,520	59,599	2.39	67.30	25,374	91,689	1.89	1.61
1982	88,385	60,856	149,241	59,812	2.50	69.30	24,981	99,160	1.99	1.67
1983	82,255	58,483	140,738	59,694	2.36	75.80	28,118	103,996	1.95	1.72
1984	90,144	60,438	150,582	61,414	2.45	72.70	20,140	89,262	2.05	1.73
1985	85,121	63,598	148,719	60,461	2.46	67.60	26,826	100,533	2.18	1.85
1986	91,865	63,520	155,385	62,334	2.49	59.70	26,731	1/121,200	2.33	1.91
1987	84,225	63,232	147,457	60,133	2.45	65.00	32,333	118,593	2.36	2.00
1988	69,306	56,430	125,736	64,771	1.94	85.20	27,074	90,312	2.05	1.82
1989	77,059	67,647	144,706	62,722	2.31	85.40	17,507	100,786	2.20	1.83
1990	83,413	62,799	146,212	61,030	2.40	80.60	26,993	104,701	2.36	1.99
1991	83,319	68,754	152,073	61,834	2.46	71.20	26,974	111,123	2.40	2.02
1992	79,140	67,763	146,903	58,903	2.49	74.30	28,216	105,290	2.33	2.05
1993	80,305	66,494	146,799	59,679	2.46	84.70	21,010	100,953	2.20	1.91
1994	81,398	68,726	150,124	58,744	2.56	86.00	22,096	104,406	2.20	1.93
1995	85,906	71,097	157,003	60,228	2.61	NA	20,786	NA	2.22	NA

NA = Not available.
1/ Per program modification, hay stocks survey reference date was changed from January 1 to December 1 beginning December 1, 1986.

Source: Agricultural Statistics Board, USDA.

Appendix table 23--Hay: Average prices received by farmers, United States, by month, 1970/71-1995/96 1/

Year	May	June	July	Aug.	Sept.	Oct. 2/	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Average 3/
						$/ton							
1970/71	23.50	22.40	22.10	22.50	23.30	23.90	24.40	25.00	25.40	25.80	26.00	26.10	26.10
1971/72	25.60	24.60	24.10	24.30	24.50	24.90	25.30	26.10	29.20	29.70	29.00	28.00	28.10
1972/73	31.10	30.90	28.50	29.30	29.80	30.30	31.00	33.00	34.60	35.40	35.40	33.90	31.30
1973/74	37.50	35.20	36.30	39.00	43.10	46.20	46.80	46.00	47.10	47.10	45.40	44.40	41.60
1974/75	54.00	47.70	48.20	51.10	51.90	51.50	50.30	50.70	50.10	49.30	49.70	52.40	50.90
1975/76	56.30	53.60	51.20	51.00	50.80	50.30	50.20	51.60	52.70	54.30	54.10	54.10	52.10
1976/77	64.10	59.60	59.00	58.70	60.80	60.10	59.00	59.00	60.90	62.70	63.90	63.20	60.20
1977/78	68.10	61.30	56.80	52.50	50.00	48.20	48.40	49.50	50.50	51.80	51.40	51.40	53.70
1978/79	55.30	51.20	49.20	49.00	47.80	47.10	46.40	47.30	48.90	50.70	50.20	49.90	49.80
1979/80	65.60	58.00	56.00	57.50	59.00	60.80	58.90	60.10	59.10	60.00	57.40	60.10	59.40
1980/81	69.30	65.10	67.00	67.20	71.90	77.20	75.00	74.80	72.80	72.50	69.80	68.20	71.00
1981/82	75.30	66.90	64.00	63.90	62.70	64.80	65.40	65.70	67.90	69.90	69.50	73.30	67.30
1982/83	77.50	69.60	66.10	65.00	66.80	67.10	68.70	68.60	70.30	73.20	69.90	74.00	69.30
1983/84	78.10	72.70	71.20	71.20	74.70	76.80	75.10	76.70	76.60	78.70	79.40	79.80	75.80
1984/85	82.50	76.10	72.40	70.40	70.70	73.10	71.40	73.40	73.00	73.10	72.20	72.50	72.70
1985/86	80.80	70.20	67.90	65.20	67.10	67.50	64.30	65.40	65.80	66.70	67.10	66.20	67.60
1986/87	66.70	61.00	58.80	58.20	57.60	57.90	56.00	57.70	56.10	58.50	59.20	64.10	59.70
1987/88	71.70	62.90	61.20	62.70	64.10	64.20	61.10	63.20	62.80	64.60	67.20	71.40	65.00
1988/89	79.70	77.00	81.60	81.40	82.90	85.10	86.40	87.60	89.50	91.80	96.90	101.00	85.20
1989/90	100.00	90.20	83.40	81.60	85.70	83.20	83.20	83.50	84.90	85.70	87.50	95.00	85.40
1990/91	96.00	85.00	81.60	81.00	83.20	84.00	80.40	78.70	77.90	77.80	80.50	85.50	80.60
1991/92	81.10	75.20	71.80	70.80	69.80	68.50	68.20	68.90	68.70	71.10	69.90	70.90	71.20
1992/93	79.50	75.80	69.70	71.90	70.10	70.30	71.00	73.50	76.10	78.00	80.50	83.60	74.30
1993/94	91.30	83.00	79.20	80.90	81.80	84.60	83.00	85.20	86.10	88.10	91.10	96.50	84.70
1994/95	99.00	88.70	82.40	82.90	82.00	86.30	86.50	85.00	84.80	85.00	86.70	90.30	86.00
1995/96	90.40	83.90	80.60	81.10	80.30	83.00							

1/ Prices reported for mid-month. 2/ October 1995 data is preliminary. 3/ U.S. season-average prices weighted by marketings.

Source: Agricultural Prices, Agricultural Statistics Board, USDA.

Appendix table 24--Shipments of grain on the Illinois waterway and the Mississippi River (Locks 11-22), 1981/82-1994/95

Crop year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
						Million tons							
1981/82	3.4	3.4	4.6	3.9	1.2	0.8	2.1	4.1	3.8	4.4	3.9	5.0	3.4
1982/83	4.1	3.2	4.2	3.2	2.7	2.3	3.8	3.3	3.9	4.2	4.2	4.8	3.6
1983/84	5.3	4.9	5.7	4.4	1.0	3.6	4.5	5.3	4.4	3.7	3.4	3.3	4.1
1984/85	3.1	4.6	5.5	3.1	2.0	0.9	3.1	4.1	3.1	3.2	3.4	3.0	3.3
1985/86	2.4	2.6	4.3	3.3	1.8	1.7	2.9	3.4	3.6	3.2	2.5	3.3	2.9
1986/87	3.2	3.1	5.2	2.4	1.2	1.7	3.6	3.8	4.0	3.8	2.8	3.5	3.2
1987/88	3.3	3.8	3.9	2.9	1.9	2.0	3.0	4.2	4.3	3.6	2.7	3.3	3.2
1988/89	3.3	3.3	3.9	3.5	1.7	1.5	2.6	3.5	4.3	4.1	3.9	3.4	3.3
1989/90	3.0	3.9	4.7	2.5	2.2	2.2	3.5	4.5	5.2	4.5	5.0	4.0	3.8
1990/91	3.6	3.4	4.8	2.1	1.6	2.0	3.1	4.0	3.7	3.6	4.4	3.8	3.4
1991/92	3.3	3.5	3.7	2.9	1.8	2.0	3.4	3.8	4.1	4.1	4.8	4.6	3.5
1992/93	3.2	2.6	3.3	2.9	2.0	1.7	3.0	2.5	3.7	3.7	0.4	1.3	2.5
1993/94	3.6	3.5	3.0	2.9	1.5	1.7	2.4	2.9	2.8	2.5	3.3	3.1	2.8
1994/95	2.0	2.9	3.6	3.1	2.4	2.0	2.6	3.6	3.1	2.3	4.2	4.8	3.1
1995/96	3.9												3.9

Source: Mississippi River Barge Traffic, U.S. Army Corps of Engineers, Rock Island District.

Appendix table 25--Weekly average of rail car loadings of grain and soybeans, 1981/82-1994/95

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
						Carloads							
1981/82	25,607	25,609	27,419	22,384	22,967	27,220	26,813	25,798	23,755	22,540	27,020	25,123	25,188
1982/83	20,321	29,523	25,350	21,888	24,700	26,318	26,807	21,243	20,849	21,393	27,942	27,461	24,483
1983/84	29,735	31,414	29,515	25,927	31,068	29,105	27,666	26,784	23,616	24,335	25,913	29,848	27,910
1984/85	29,162	24,482	28,587	25,441	25,310	23,688	23,340	20,164	17,715	24,724	21,836	20,218	23,722
1985/86	18,889	26,227	28,214	23,482	25,424	22,558	20,648	17,743	17,673	24,907	24,561	24,342	22,889
1986/87	27,329	33,605	29,877	24,827	23,086	26,663	27,134	25,046	26,189	32,154	31,515	30,825	28,187
1987/88	32,977	32,820	29,947	29,225	32,223	34,224	34,241	32,963	30,861	33,316	29,357	27,010	31,597
1988/89	29,014	30,628	27,140	27,120	30,324	30,583	31,436	30,181	25,943	27,253	24,271	25,990	28,324
1989/90	24,437	28,950	31,701	29,411	32,250	32,605	29,648	27,938	25,696	28,122	25,255	26,904	28,576
1990/91	23,982	27,622	26,822	24,359	26,337	28,560	28,100	24,927	20,833	24,500	25,507	27,581	25,761
1991/92	27,537	29,833	27,300	28,264	30,017	29,966	29,862	24,974	20,508	23,606	25,610	26,138	26,968
1992/93	25,785	30,684	31,417	29,657	29,571	30,399	30,160	28,080	24,904	24,732	25,463	25,663	28,043
1993/94	27,063	29,220	28,116	25,477	26,495	25,726	25,113	23,623	21,889	23,265	23,385	24,735	25,342
1994/95	25,069	29,165	29,496	27,900	28,299	29,277	30,314	27,813	25,970	28,449	28,778	30,736	28,439
1995/96	31,171												31,171

Source: Association of American Railroads.

Appendix table 26--Rail-freight-rate index for grain, crop years 1981/82-1994/95

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
						December 1984=100							
1981/82	88.5	89.4	89.4	89.4	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	92.1
1982/83	93.0	93.0	93.0	93.0	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.6
1983/84	93.9	94.2	94.2	94.2	98.0	98.0	98.0	98.0	98.0	98.0	98.4	98.4	96.8
1984/85	98.4	100.0	100.0	100.0	100.0	100.0	99.3	99.3	98.7	97.3	96.4	96.3	98.8
1985/86	98.0	98.0	98.0	98.0	98.9	99.0	99.0	99.1	99.2	99.2	99.2	99.2	98.7
1986/87	99.2	98.5	98.5	97.8	98.3	98.3	98.8	98.6	98.5	98.6	98.6	98.5	98.5
1987/88	98.9	99.2	99.1	98.5	101.2	101.2	101.4	102.7	104.1	104.3	106.4	109.3	102.2
1988/89	109.3	108.3	108.5	108.2	109.2	109.2	108.8	108.8	108.8	108.0	108.4	108.4	108.7
1989/90	108.4	108.6	108.7	108.7	109.1	109.1	109.1	109.7	109.7	109.2	109.7	110.5	109.1
1990/91	110.6	111.3	111.3	111.3	111.0	111.0	112.5	112.0	111.2	109.9	110.8	110.8	111.1
1991/92	110.8	111.6	111.3	111.3	111.4	111.6	110.8	110.2	110.5	110.5	110.3	110.3	110.9
1992/93	110.3	113.1	113.1	114.4	114.4	114.4	114.5	114.5	114.2	114.1	114.1	114.2	113.8
1993/94	114.2	115.8	116.0	115.7	116.1	115.6	115.7	115.1	115.1	114.8	114.3	114.3	115.2
1994/95	114.6	116.7	116.7	116.6	117.1	116.9	117.7	117.7	117.7	117.7	112.6	114.9	116.4
1995/96	115.6												115.6

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

Appendix table 27--Indexes of animal units, 1975/76-1994/95 1/

Year	Animal units consuming				Grain consuming animal units				
	Grain	High protein	Roughage	Grain & roughage	Dairy	Beef	Pork	Poultry	Other
	Million units								
1975/76	71.6	96.6	96.3	86.5	12.3	25.3	17.5	15.9	0.7
1976/77	73.1	99.4	92.9	85.0	12.2	24.5	19.4	16.3	0.7
1977/78	74.7	100.9	87.7	82.3	12.1	25.5	19.6	16.9	0.7
1978/79	77.2	105.9	84.0	81.0	12.0	24.9	21.7	17.9	0.7
1979/80	78.1	108.6	85.2	82.1	12.0	23.3	23.8	18.2	0.7
1980/81	76.4	107.8	87.8	83.0	12.1	22.6	22.4	18.6	0.7
1981/82	73.0	104.6	88.9	82.5	12.2	21.2	20.3	18.6	0.7
1982/83	75.2	105.4	87.7	82.5	12.4	23.2	20.5	18.3	0.7
1983/84	74.6	105.7	86.7	81.7	12.4	22.5	20.4	18.6	0.7
1984/85	75.2	105.9	83.2	79.7	12.1	23.5	19.8	19.0	0.7
1985/86	74.5	107.1	80.5	77.8	12.5	22.2	19.3	19.8	0.7
1986/87	74.4	110.0	78.3	76.4	11.7	21.4	19.4	21.1	0.7
1987/88	76.8	112.9	76.3	76.1	11.5	22.2	20.8	21.5	0.7
1988/89	76.8	114.7	74.5	75.0	11.3	21.4	21.3	22.0	0.7
1989/90	77.4	117.2	73.7	74.7	11.2	21.6	20.7	23.1	0.7
1990/91	80.1	120.7	73.5	75.6	11.2	23.3	21.0	23.9	0.7
1991/92	80.7	123.5	74.7	76.5	10.9	22.2	22.3	24.6	0.6
1992/93	82.7	126.1	75.3	77.7	10.9	23.6	22.4	25.3	0.6
1993/94	84.0	128.5	76.4	78.8	10.7	24.0	22.6	26.0	0.6
1994/95	84.6	131.3	78.3	80.2	10.7	23.3	23.1	26.9	0.6

1/ Index based upon feed consumed by one dairy cow in 1969-71 feeding years.

Appendix table 28--Feed concentrates, number of animal units, and feed per unit, 1981-94 1/

	1981	1982	1983	1984	1985	1986	1987
				Million metric tons			
Concentrates:							
Corn	107.8	116.2	98.5	104.5	104.5	118.6	121.9
Sorghum	10.6	12.6	9.8	13.7	16.9	13.6	14.1
Oats	6.2	6.6	6.7	6.5	6.4	5.5	4.5
Barley	4.6	5.8	6.1	6.3	7.1	6.0	5.9
Wheat and rye	3.5	7.2	12.7	10.2	11.2	11.6	6.0
Oilseed meals	18.3	19.6	17.4	19.8	19.3	20.1	21.4
Animal protein feeds	3.0	2.9	2.9	3.5	3.4	3.3	3.2
Grain protein feeds	1.6	1.6	2.0	4.3	2.1	2.1	2.6
Other byproduct feeds	10.1	10.6	10.3	10.9	10.7	11.1	10.9
Total	165.7	175.7	166.5	179.6	181.6	191.8	190.5
Grain-consuming animal units (GCAU's):				Million units			
Dairy cattle	12.2	12.4	12.4	12.1	12.5	11.7	11.5
Cattle on feed	16.3	18.5	17.8	19.1	18.0	17.3	18.2
Other cattle	4.9	4.8	4.7	4.5	4.3	4.2	4.0
Hogs	20.3	20.5	20.4	19.8	19.3	19.4	20.8
Poultry	18.6	18.3	18.6	19.0	19.8	21.1	21.5
Other livestock	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Total	73.0	75.2	74.6	75.2	74.5	74.4	76.7
Concentrates GCAU				Tons per unit			
Four feed grains	1.77	1.88	1.62	1.74	1.81	1.93	1.91
All concentrates	2.27	2.34	2.23	2.39	2.44	2.58	2.48

	1988	1989	1990	1991	1992	1993	1994
				Million metric tons			
Concentrates:							
Corn	100.1	111.7	118.4	123.9	134.5	119.5	140.6
Sorghum	11.8	13.1	10.4	9.5	11.9	11.5	10.2
Oats	3.3	4.8	3.7	3.3	3.0	3.1	2.6
Barley	4.2	3.9	4.7	4.9	3.8	5.9	4.7
Wheat and rye	3.6	7.7	12.2	6.5	4.1	9.8	7.6
Oilseed meals	19.7	22.0	23.2	23.8	24.5	25.7	27.5
Animal protein feeds	3.0	3.1	3.0	3.0	3.1	3.3	3.0
Grain protein feeds	2.3	1.7	0.2	0.8	0.8	1.1	0.4
Other byproduct feeds	11.0	11.4	12.3	11.7	12.5	12.9	9.8
Total	159.0	179.4	188.0	187.3	198.1	192.8	206.4
Grain-consuming animal units (GCAU's):				Million units			
Dairy cattle	11.3	11.2	11.2	10.9	10.9	10.7	10.7
Cattle on feed	17.5	17.8	19.3	18.3	19.5	19.8	19.1
Other cattle	4.0	4.0	3.9	4.0	4.0	4.1	4.2
Hogs	21.3	20.7	21.0	22.3	22.4	22.6	23.1
Poultry	22.0	23.1	23.9	24.6	25.3	26.0	26.9
Other livestock	0.7	0.7	0.7	0.6	0.6	0.6	0.6
Total	76.8	77.4	80.1	80.8	82.7	83.9	84.6
Concentrates GCAU				Tons per unit			
Four feed grains	1.55	1.73	1.71	1.75	1.9	1.7	1.9
All concentrates	2.07	2.32	2.35	2.32	2.4	2.3	2.4

1/ Marketing years, 1994/95 forecast.

Appendix table 29--Processed feeds: Quantity fed, 1981-94 1/ 2/

	1981	1982	1983	1984	1985	1986	1987
			---- 1,000 metric tons ----				
High protein:							
Oilseed meal--							
Soybean 3/	16,070	17,514	15,980	17,672	17,318	18,539	19,344
Cottonseed	1,848	1,495	1,022	1,595	1,379	1,026	1,442
Linseed	70	94	113	109	100	115	127
Peanut	107	67	68	112	159	103	109
Sunflower	200	433	240	307	313	269	380
Canola	29	53	80	139	120	204	219
Total	18,324	19,656	17,503	19,934	19,389	20,256	21,621
Animal proteins--							
Tankage and meat meal	2,261	2,133	2,102	2,523	2,540	2,395	2,458
Fishmeal and solubles	480	412	453	589	464	471	353
Milk products	303	361	368	386	374	399	411
Total	3,043	2,906	2,923	3,497	3,377	3,265	3,221
Grain protein feeds--							
Gluten feed and meal	904	757	1,281	3,304	1,055	1,165	1,484
Total 4/	904	757	1,281	3,304	1,055	1,165	1,484
Other:							
Wheat millfeeds	4,848	5,139	5,078	5,084	5,278	5,714	5,652
Rice millfeeds	513	433	461	456	503	610	551
Alfalfa meal	899	887	898	808	776	589	554
Fats and oils	657	670	656	665	774	833	826
Miscellaneous byproduct feeds 5/	544	584	638	709	791	895	976
Total 6/	7,461	7,713	7,731	7,722	8,122	8,641	8,559
Grand total	29,732	31,032	29,438	34,457	31,943	33,327	34,885

	1988	1989	1990	1991	1992	1993	1994 7/
			---- 1,000 metric tons ----				
High protein:							
Oilseed meal--							
Soybean 3/	17,686	20,222	20,805	20,873	22,000	22,936	24,222
Cottonseed	1,481	1,239	1,470	1,584	1,286	1,287	1,542
Linseed	93	126	112	115	96	103	102
Peanut	147	112	103	156	161	103	175
Sunflower	298	271	306	450	401	291	578
Canola	322	316	358	585	585	1,002	941
Total	20,027	22,286	23,154	23,763	24,530	25,722	27,560
Animal proteins--							
Tankage and meat meal	2,329	2,320	2,292	2,305	2,152	2,219	2,322
Fishmeal and solubles	265	324	249	233	479	653	272
Milk products	405	418	416	426	421	415	408
Total	2,998	3,062	2,957	2,964	3,053	3,287	3,003
Grain protein feeds--							
Gluten feed and meal	1,289	218	164	795	796	1,098	397
Total 4/	1,289	218	164	795	796	1,098	397
Other:							
Wheat millfeeds	5,717	5,617	5,987	6,210	6,318	6,746	6,571
Rice millfeeds	615	554	555	530	548	588	669
Alfalfa meal	365	300	333	265	284	121	214
Fats and oils	943	973	999	878	991	1,061	1,026
Miscellaneous byproduct feeds 5/	1,107	1,202	1,248	1,309	1,323	1,338	1,343
Total 6/	8,747	8,646	9,122	9,192	9,464	9,854	9,823
Grand total	33,061	34,212	35,397	36,714	37,843	39,961	40,783

NA = Not available.
1/ Year beginning October. 2/ Adjusted for stocks, productions, foreign trade, and nonfeed uses where applicable. 3/ Includes use in edible soy products and shipments to U.S. territories. 4/ Excludes brewers' dried grains and distillers' dried grains due to unavailability of production data. 5/ Allowance for hominy feed, oat millfeeds, and screenings. 6/ Excludes dried and molasses beetpulp, and inedible molasses due to unavailability of production data. 7/ Forecast.

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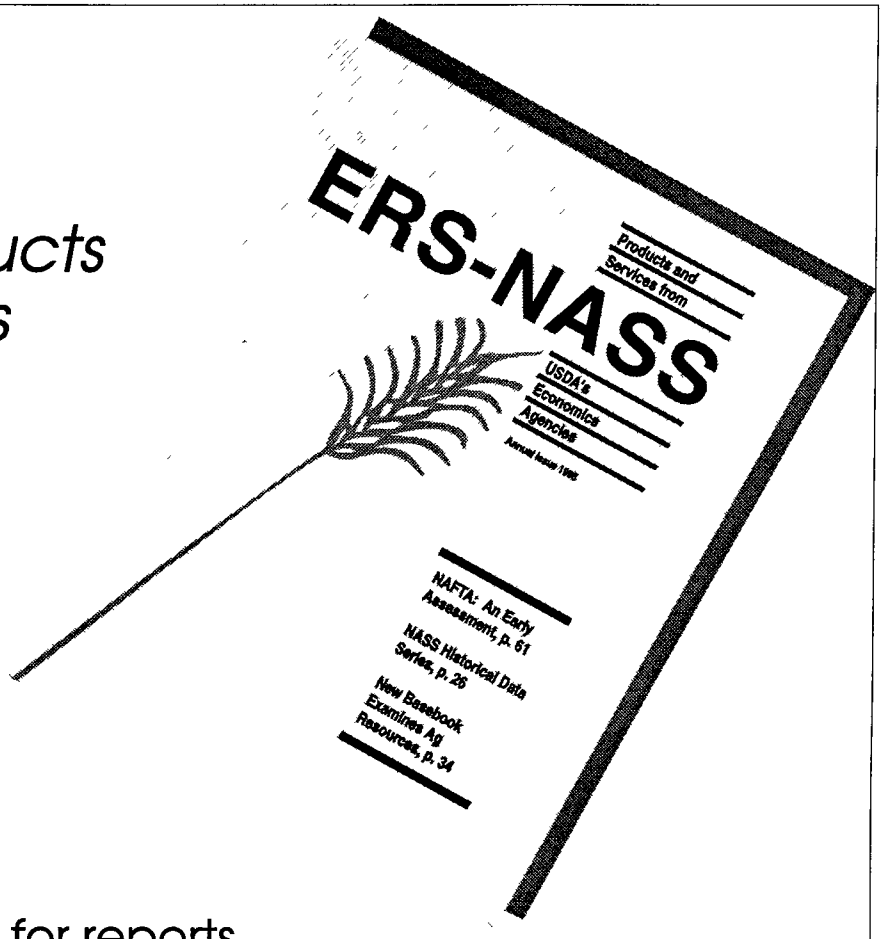

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