

FEED OUTLOOK

United States Department of Agriculture



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HIGHLIGHTS

- 1998 Corn Production Estimated at 9.76 Billion Bushels
- 1998 Sorghum, Barley, and Oats Production Little Changed from Forecasts
- Historical Data Revisions Indicate Lower Production and Feed and Residual Estimates for Some Years
- Domestic Corn Use on Track for Another Record in 1998/99, But Ending Stocks Expected To Be the Highest in 6 Years
- Revised Supply and Use Tables for 1992/93-1997/98 Included in This Report

ABUNDANT FEED GRAIN SUPPLIES AND LOW PRICES SPUR STRONG DOMESTIC USE

U.S. feed grain production in 1998 is estimated at 271.2 million metric tons, up 4 percent from the year before and the second highest on record after 283.2 million in 1994. Corn accounts for all of the year-to-year increase, as sorghum and barley production declined and oats were virtually unchanged. Total feed grain supply for 1998/99 is forecast at 312 million tons, down 1 percent from last month, but up nearly 8 percent and also the highest since 1994/95, reflecting a large increase in carryin stocks as well as the larger crop. Carryin stocks of feed grains are up 41 percent from 1997/98 to 38 million tons.

Despite prospects for only lackluster exports, total feed grain disappearance will be very large because of robust domestic demand. Prices for corn and the other feed grains have been low in the first few months of the marketing year, and are not expected to change dramatically in the near future. Domestic use in 1998/99 is forecast to rise 3 percent from a year earlier to 212 million tons, the second consecutive record. Even after some revisions (discussed below), feed and residual use is forecast to be record high, reflecting record meat production. Recent expectations for cutbacks in pork production, in response to very low hog prices, will have an impact later in the calendar year, and more of a bearing on feed grains in the 1999/2000 marketing year. Exports are forecast to rise 8 percent in 1998/99, but remain fairly weak historically. Most of the gain reflects a reduction in expected competitor exports and only a modest increase in global imports.

NASS PRODUCTION REVISIONS LEAD TO REDUCED FEED AND RESIDUAL

Numbers in this report incorporate data revisions made by the National Agricultural Statistics Service (NASS). See Table 1 following the text for supply and distribution by quarter going back to 1992/93.

In December, NASS issued revised estimates of grain production and stocks for 1992-1997. There were no historical stock changes for corn, and only a few minor stock adjustments for the other feed grains. The largest changes were in corn production, lowered 159 million

bushels for 1997, 61 million for 1996, and 52 million for 1994, largely reflecting lower planted and harvested acres in several States. Corn production for 1995 went up 26 million bushels due to a slight rise in acres. Sorghum production similarly was reduced 20 million bushels for 1997, and by smaller amounts for 1994-1996. Barley output declined 15 million bushels for 1997, and smaller amounts for 1995 and 1996. Oats followed a similar pattern, cut 9 million for 1997 and less for 1993-1996.

These production revisions for corn led to corresponding reductions in feed and residual use, with the exception of 1995/96 where feed and residual use increased. There were no revisions in other categories of use and the entire amount of each production change was applied to feed and residual. Thus, feed and residual use is significantly lower than previously estimated for most recent years. The largest change, a drop of 159 million bushels in 1997/98 corn, represents a 3-percent decline from the previous estimate.

1998 CORN: SECOND HIGHEST CROP AND YIELD PER ACRE

U.S. corn production in 1998 was 9,761 million bushels, down 1 percent from the last forecast made in November, but 6 percent higher than the 1997 crop. The drop from the earlier forecast is due to a downward revision in acreage that more than outweighed a higher yield. Planted area in 1998 was indicated at 80.2 million acres, still the highest since 1985, while harvested acres were 79.6 million, virtually equal to 1997. The average yield reached 134.4 bushels per acre, up 7.7 bushels from a year earlier. Both production and yield stand as the second highest on record behind 1994, when revised production was 10,050 million bushels and yield was 138.6 bushels per acre.

Severe heat and drought sharply reduced yield and production in Texas and across several Southern States from Louisiana to the Carolinas. However, losses in this region were more than offset by gains elsewhere, especially in the northern and western edges of the Corn Belt. Record crops were realized in Minnesota, Kansas, Nebraska, and the Dakotas. Objective yield data indicated record stalk and ear counts for the seven States where these data are collected (Illinois, Indiana, Iowa, Minnesota, Nebraska, Ohio, and Wisconsin).

DECEMBER STOCKS INDICATE RECORD CORN DISAPPEARANCE IN FIRST QUARTER

Stocks of corn on December 1, 1998, were 8.05 billion bushels, up 11 percent from a year earlier. On-farm stocks accounted for 66 percent of the total. This indicates total disappearance for September-November was 3,022 million bushels, up from the revised 2,845 million during the same period a year earlier and also surpassing the old record of 2,856 million in the first quarter of 1995/96. Both feed and residual use and food, seed, and industrial use (FSI) were record high, although the breakout among categories could change slightly pending release of final trade data for November.

CORN STOCKS PROJECTED TO RISE TO 1,808 MILLION BUSHELS

Total supply of corn is projected at 11.1 billion bushels in 1998/99, up about 1 billion from the year before. This will be the highest since 12 billion bushels in 1987/88. The increase is projected to outpace gains in use, resulting in the second consecutive year of building stocks. Ending stocks of corn in 1998/99 are projected to increase 500 million bushels, or 38 percent, to the highest since 1992/93. Total use is projected at 9,270 million bushels, up nearly 500 million from the previous year and second highest after the revised record of 9,352 million in 1994/95.

The forecast of corn feed and residual use was lowered 150 million bushels this month to 5,700 million, mainly reflecting the lower plane of revised estimates. This is up nearly 4 percent from the 1997/98 record, and is consistent with a sharp drop in the availability of sorghum to feed and expectations for less wheat feeding during June-August 1999. Forecast FSI use of corn was trimmed by 10 million bushels this month to 1,870 million, but still up 5 percent from last year's record. The corn export forecast is unchanged this month at 1,700 million bushels, up 13 percent from last year's weak showing.

CORN FOOD, SEED, AND INDUSTRIAL (FSI) USE RISING

Food, seed and industrial (FSI) use of corn in 1998/99 is expected to total 1,870 million bushels, up from 1,782 million in 1997/98. In September-November 1998, FSI use was up 3 percent from a year earlier. In 1998/99, FSI use would represent 20 percent of total use, the same as in 1997/98, and up 1 percent from 1996/97. FSI use in September-November 1997 was up for high fructose corn sirup (HFCS), ethanol, cereals, and other products; while corn used to make glucose, dextrose, starch, beverage alcohol, and manufacturing alcohol were down.

Corn used for HFCS production in September-November 1998 was up 4 percent from September-November 1997. The warm fall in many parts of the United States likely kept soft drink sales up and led to increased sales of HFCS. With the recent return to more seasonal weather, soft drink sales have likely declined and a more modest increase in HFCS production is expected in the winter quarter. Corn used to make glucose and dextrose during September-November 1998 was down 5 percent from a year earlier but may be down only about 2 percent for the year-over-year total. Many bakery producers have been reformulating their no-fat products and adding back fat. In the process, they are likely cutting the use of corn sweeteners, which may have caused the decline in glucose and dextrose production. In the first quarter of the 1998/99 corn marketing year, corn used for starch production has been down 3 percent from a year earlier.

Monthly ethanol production reported by the Energy Information Administration in the Department of Energy indicates that corn used to make ethanol in September-November 1998 totaled 132 million bushels, up from 116 million in 1997. This is the largest quarterly use since the 1994/95 record year, when 133 million bushels were used. This production reflects higher use of capacity and the new plants that have been added in the last year to take advantage of various State-level ethanol production incentives. Also, the decline in corn prices has encouraged additional production. However, low gasoline prices relative to alcohol have not encouraged splash blending for increased octane and ethanol stocks are large. Corn used to make ethanol in 1998/99 is estimated to be up 14 percent from the 481 million bushels used in 1997/98. Beverage and manufacturing alcohol production in 1998/99 is estimated to use 125 million bushels of corn, down 6 percent from the estimated 133 million bushels used in 1997/98. A slowing of exports suggests production will likely be down.

SORGHUM CROP DECLINES

Sorghum production in 1998 is estimated at 520 million bushels, down 18 percent from revised 1997 production. The average yield in 1998 fell about 2 bushels per acre to 67.3 bushels, but there were substantial differences among the main growing areas. Planted acres were estimated at 9.6 million acres, the lowest since 1995, and harvested acres at 7.7 million, the lowest since 1953. Drought damage led to large abandonment in Texas and New Mexico.

In line with a sharp decline in supply, sorghum use is forecast to fall 19 percent to 515 million bushels. Most of the reduction will occur in feed and residual use, expected to be the lowest

since the 1950's. Smaller declines are expected in exports and FSI use. Most of the sorghum going into FSI is used to make ethanol in plants in Kansas, Nebraska, and Illinois, as long as it is available and priced competitively below corn. In contrast to corn, total stocks of sorghum on December 1, 1998 were down 11 percent from the year before to 334 million bushels, with most of the decline in Texas. U.S. ending stocks for the 1998/99 year are projected at 54 million bushels, up slightly from the year before.

BARLEY PRODUCTION SLIPS, TOTAL USE TO DECLINE DESPITE WEAK PRICES

Barley production for 1998 is estimated at 352 million bushels, down 8 million from revised 1997 production (which went down nearly 15 million bushels). Planted area in 1998 was 6.3 million acres, down from 6.7 million in 1997, and harvested acres fell to just 5.9 million from 6.2 million.

Like oats, a declining trend in acreage in recent years has left barley area historically low. Plantings in 1998 were the lowest since records started being kept in 1926. Harvested data go back further and indicate 1998 acres were the lowest since the turn of the century. Weak prices and widespread disease problems in the major producing States of North Dakota and Minnesota have made barley less attractive.

In 1998/99, total use of barley is expected to be down 1 percent from the 390 million bushels used in 1997/98, even though prices are weak. The pattern of use will change as feed use rebounds while exports sink. Feed and residual use in June-November 1998 was up 26 percent from the 99 million bushels used in the same period in 1997. For the entire 1998/99 marketing year, feed and residual use is expected to be up 29 percent from the 144 million bushels used a year earlier. (Feed and residual use for 1997/98 was revised down nearly 14 million bushels because of the historical revision in production and stocks). Exports of barley are expected to decline to 30 million bushels from 74 million in 1997/98, mainly because of a huge increase in highly subsidized exports from the European Union.

OATS PRODUCTION EVEN WITH LAST YEAR

Oats production in 1998 was revised down 2 million bushels from last month to 167 million bushels, making production the same as in 1997. Oats production remains very low and the 1998 crop was the third smallest since records were first kept in 1866. The record low was recorded in 1995 at a final number (from the recent historical revisions) of 153.245 million bushels. This was down 2 million bushels from the earlier estimate. The largest change in the historical revisions occurred in 1997 when production was reduced 8 million bushels.

Feed and residual use of oats in June-November 1998 was up 14 percent from the 99.7 million bushels used in the same period in 1997. For the full 1998/99 year, feed and residual use is forecast at 165 million bushels, up slightly from the year before. Food, seed, and industrial use is forecast to be steady at 95 million bushels. There have been some industry reports that hot cereal sales have been weak, but with more seasonal weather recently sales may have picked up.

FEED AND RESIDUAL USE STRENGTHENS

Feed and residual use of the four feed grains plus wheat in 1998/99 is expected to increase 1 percent from the 164 million metric tons used in September 1997-August 1998. Feed and residual use in September-November 1998 was up 4 percent from a year earlier. Corn accounted for 94 percent of the September-November 1998 total and is expected to represent 87 percent of feed and residual use for all of 1998/99.

The index of grain consuming animal units (GCAU's) for 1998/99 is expected to be nearly the same as 1997/98's 88 million. The grain used per GCAU in 1998/99 would be 1.90 tons, up 2 percent from 1997/98. In the index components in 1997/98, GCAU's for hogs, broilers, and layers are up from the previous year.

Pork production in 1999 is expected to decline nearly 1 percent from the 19 billion pounds produced in 1998, which was up 10 percent from 1997. Hog farmers responding to the December 1997 survey indicated that they intended to decrease the number of sows farrowing in December 1998-May 1999 by 4 percent relative to the prior year. If producers carry through with these reported intentions, feed needs by the pork sector are likely to be weaker in 1998/99.

Production of broilers and eggs in 1999 is expected to increase from anticipated 1998 levels and maintain strong demand for feed grains. Broiler production is expected to increase nearly 6 percent from 1998 as producers respond to strong domestic demand. In 1999, turkey producers are expected to maintain production at about 1998 levels. Egg producers are expected to produce 6.8 billion dozen eggs in 1999, up 2 percent from 1998. With these increases, feed needs by the poultry sector are likely to remain strong.

Dairy cow numbers are likely to continue to trail the previous year, but with increased production per cow, milk production in 1999 is expected to total 160.1 billion pounds, up from 157.6 billion in 1998. Thus with increased milk production per cow, feed use by the dairy industry will continue strong.

HAY STOCKS INCREASE, PRICES DECLINE

Stocks of all hay on farms December 1, 1998, were up 8.5 percent from 1997's revised 103 million tons. Stock increases occurred in 33 of the 48 contiguous States. The mild winter conditions across the United States prolonged pasturing and reduced the need for hay feeding. Drought conditions in the southern States, from New Mexico, Texas, and Oklahoma to Georgia and Florida, played a major role in their stock decreases from a year earlier. Louisiana, Texas, and Oklahoma had the largest stock decreases from last December.

Roughage consuming animal units (RCAU's) in 1998/99 are estimated to be down 1 percent from 1997/98. Hay stocks are 1.4 tons per RCAU, compared with 1.3 tons last year.

Hay production in 1998 totaled 151 million tons, down 1 percent from the revised 1997 total. Acreage of all hay was down 2 percent from the 61 million acres harvested in 1997 but yields were up 1 percent at 2.52 tons per acre. South Dakota became the top hay producing State, up from third place in 1997, followed by California, and Missouri. Texas, which was the leading hay producing State in 1997, dropped to number seven as a prolonged drought sharply cut other hay production.

Production of alfalfa and alfalfa hay mixtures in 1998 was up 4 percent from 1997's 79 million tons. Acreage was up 91,000 acres and yields in 1998 were up 4 percent, from 1997's 3.33 tons per acre. In 1997, the National Agricultural Statistics Service began collecting data on the number of acres of new seedings to alfalfa and alfalfa mixtures. During 1998, the number of acres seeded was down 5 percent from the 4 million acres seeded in 1997. Wisconsin was the leading State with 600,000 acres seeded, down 8 percent from last year. Minnesota was second with 250,000, down from 300,000 in 1997. With only 2 years of data on alfalfa seedings it is hard to tell if this means fewer alfalfa acres or that the fields came through the 1997/98 winter with low winterkill.

Other hay production was down 6 percent from 1997's revised 74 million tons. In 1998, the area harvested of other hay was 36 million acres, down 3 percent from 1997. Average yields in 1998 were down 3 percent from the 1.97 tons per acre in 1997. Texas and Missouri tied for the number one position in 1998, whereas Texas was first in 1997 and Missouri was second. Production of other hay in Texas in 1998 was down 4 million tons from 1997 because of drought and represented 87 percent of the total decline in other hay production.

Corn for silage in 1998 was down 3 percent from the revised 97 million tons produced in 1997. Acreage was down 2 percent and yields were down 1 percent. Sorghum for silage in 1998 totaled 3 million tons, down 35 percent from 1997. In 1998, acreage was down 26 percent from the year earlier, and yields were down 13 percent from the 13.1 tons per acre in 1997. Total silage production per roughage consuming animal unit in 1998 was 1.3 tons, the same as in 1997.

Mid-month prices for all hay reported by farmers in December 1998 were \$78.40 per ton, down from \$81.40 in November, and down from \$95.20 in December 1997. Prices in 1998 had been weakening relative to a year earlier, even with the drought because many cattlemen reduced their herds rather than buy hay. Prices received for alfalfa hay in December were \$81.40 per ton, down from \$85 in November and \$102 a year earlier. Other hay prices averaged \$2 per ton below a year earlier during May through December. In December the price of other hay was \$69.40 per ton, up from \$69.30 in November, but down from \$76.10 a year earlier. Given current estimates of livestock numbers and hay stocks, prices may remain weak during the remainder of the hay marketing year.

PRICE EXPECTATIONS REMAIN WEAK

Feed grain prices have been low through the first few months of the marketing year. The average price of corn received by farmers has stayed below \$2.00. Use of the loan deficiency payments has been widespread, indicating prices in many locations have been below the local loan rate. The national loan rate for corn is \$1.89 per bushel. There were hopes that prices might perk up if early season dryness in Argentina continued. While unfavorable weather in coming months may reduce production prospects, recent rains have improved conditions. Still, farm prices could strengthen seasonally in the next few months if large amounts of unmarketed supply do not swamp the market.

The forecast season average farm price of corn was reduced 10 cents on the high end to a range of \$1.80-2.10 per bushel. The midpoint of the range would be the lowest since \$1.94 in 1987/88. The sorghum price forecast was also reduced this month to \$1.60-1.90 per bushel. Prices to date have averaged 88 percent of the corn price despite the sharp reduction in sorghum supply.

The all barley price is forecast at \$1.85-2.05 per bushel, after the range was tightened by 5 cents on each end. In June-December 1998, farm prices for barley averaged \$1.98 per bushel, down from \$2.39 in the same period last year. However, the premium of malting over feed barley has widened, averaging 84 cents so far, compared with 65 cents for the same period a year earlier. The oats price forecast was reduced 5 cents this month to \$1.05-1.15 per bushel. Farm prices for oats in June-December 1998 averaged \$1.13, down from \$1.62 for the same period in 1997.

INTERNATIONAL COARSE GRAIN FORECASTS LITTLE CHANGED THIS MONTH; U.S. BARLEY EXPORT FORECAST TRIMMED

World coarse grain production in 1998/99 is forecast nearly at the same level as a year earlier, with sharply increased corn production in the United States and China nearly offset by a sharp reduction in coarse grain production in the former Soviet Union and smaller declines in Eastern Europe, the EU, and Argentina. Global consumption is expected to increase in 1998/99, mostly in the United States, with foreign coarse grain consumption forecast down slightly. World coarse grain trade is expected to increase about 1 million tons from last year's low level, reaching 87.5 million in 1998/99. U.S. corn exports will increase while those of Argentina and China decline. World consumption is expected to remain less than production, boosting ending stocks for the third straight year. Most of the stock increase is expected in the United States and China, more than offsetting the sharp decline in the former Soviet Union. Because U.S. corn dominates world coarse grain trade, large U.S. corn supplies will tend to depress world coarse grains prices in 1998/99.

The U.S. 1998/99 barley export estimate was reduced 5 million bushels to 30 million this month because the pace of shipments was slower than expected. U.S. barley exports are now forecast to be equal to imports. Mexico's barley import forecast was also reduced by a similar amount.

Although unchanged this month, U.S. oats import forecasts have increased in recent months. Shipments from Scandinavia were stronger than expected in recent months. U.S. imports accounted for an estimated 87 percent of world oats trade in 1997/98 (October-September), about the same as the previous year. The EU Commission awarded more export subsidies for oats during the fall of 1998 than expected. Earlier, shipments of oats from Scandinavia were expected to fall sharply in 1998/99 because of reduced production and quality. However, production estimates have increased and the Commission has raised the allowed amount of subsidized exports. Thus, in December, the U.S. oats import estimate was raised 10 million bushels to 100 million.

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The next Feed Outlook will be released February 12, 1999.

Table 1--Feed Grains: Marketing year supply and disappearance 1/

| Year/ Qtr. | Beg. stocks | Produc- tion | Im- ports | Supply | FSI | Feed & resid. | Ex- ports | Total disp. | End. stks. | Farm price |
|---------------------------|----------------|-----------------|--------------|--------|-------|------------------|--------------|----------------|---------------|---------------|
| -----Million bushels----- | | | | | | | | | | |
| CORN | | | | | | | | | | |
| -----\$/bu----- | | | | | | | | | | |
| 1992/93 | | | | | | | | | | |
| Sep-Nov | 1,100 | 9,477 | 1 | 10,578 | 370 | 1,814 | 488 | 2,672 | 7,906 | 2.04 |
| Dec-Feb | 7,906 | --- | 1 | 7,907 | 365 | 1,401 | 463 | 2,229 | 5,678 | 2.00 |
| Mar-May | 5,678 | --- | 2 | 5,680 | 414 | 1,146 | 411 | 1,971 | 3,709 | 2.13 |
| Jun-Aug | 3,709 | --- | 3 | 3,712 | 407 | 891 | 301 | 1,599 | 2,113 | 2.19 |
| Mkt. yr. | 1,100 | 9,477 | 7 | 10,584 | 1,556 | 5,252 | 1,663 | 8,471 | 2,113 | 2.07 |
| 1993/94 | | | | | | | | | | |
| Sep-Nov | 2,113 | 6,338 | 5 | 8,456 | 382 | 1,702 | 435 | 2,519 | 5,937 | 2.34 |
| Dec-Feb | 5,937 | --- | 8 | 5,945 | 378 | 1,241 | 330 | 1,949 | 3,996 | 2.71 |
| Mar-May | 3,996 | --- | 6 | 4,002 | 422 | 951 | 270 | 1,642 | 2,360 | 2.67 |
| Jun-Aug | 2,360 | --- | 1 | 2,361 | 428 | 790 | 293 | 1,511 | 850 | 2.34 |
| Mkt. yr. | 2,113 | 6,338 | 21 | 8,472 | 1,609 | 4,684 | 1,328 | 7,621 | 850 | 2.50 |
| 1994/95 | | | | | | | | | | |
| Sep-Nov | 850 | 10,051 | 2 | 10,903 | 408 | 1,965 | 449 | 2,822 | 8,080 | 2.05 |
| Dec-Feb | 8,080 | --- | 4 | 8,084 | 408 | 1,494 | 590 | 2,493 | 5,592 | 2.18 |
| Mar-May | 5,592 | --- | 3 | 5,595 | 450 | 1,162 | 568 | 2,180 | 3,415 | 2.35 |
| Jun-Aug | 3,415 | --- | 1 | 3,416 | 439 | 849 | 570 | 1,858 | 1,558 | 2.59 |
| Mkt. yr. | 850 | 10,051 | 10 | 10,910 | 1,704 | 5,470 | 2,177 | 9,352 | 1,558 | 2.26 |
| 1995/96 | | | | | | | | | | |
| Sep-Nov | 1,558 | 7,400 | 4 | 8,962 | 413 | 1,782 | 660 | 2,856 | 6,106 | 2.80 |
| Dec-Feb | 6,106 | --- | 5 | 6,111 | 401 | 1,348 | 562 | 2,311 | 3,800 | 3.15 |
| Mar-May | 3,800 | --- | 5 | 3,805 | 429 | 1,048 | 610 | 2,087 | 1,718 | 3.76 |
| Jun-Aug | 1,718 | --- | 3 | 1,721 | 369 | 530 | 396 | 1,295 | 426 | 4.31 |
| Mkt. yr. | 1,558 | 7,400 | 16 | 8,974 | 1,612 | 4,708 | 2,228 | 8,548 | 426 | 3.24 |
| 1996/97 | | | | | | | | | | |
| Sep-Nov | 426 | 9,233 | 3 | 9,662 | 383 | 1,890 | 487 | 2,759 | 6,903 | 2.87 |
| Dec-Feb | 6,903 | --- | 2 | 6,905 | 394 | 1,492 | 525 | 2,411 | 4,494 | 2.66 |
| Mar-May | 4,494 | --- | 4 | 4,498 | 465 | 1,105 | 431 | 2,001 | 2,497 | 2.77 |
| Jun-Aug | 2,497 | --- | 4 | 2,500 | 450 | 814 | 353 | 1,617 | 883 | 2.49 |
| Mkt. yr. | 426 | 9,233 | 13 | 9,672 | 1,692 | 5,302 | 1,795 | 8,789 | 883 | 2.71 |
| 1997/98 | | | | | | | | | | |
| Sep-Nov | 883 | 9,207 | 2 | 10,092 | 429 | 2,036 | 380 | 2,845 | 7,247 | 2.53 |
| Dec-Feb | 7,247 | --- | 1 | 7,248 | 418 | 1,510 | 380 | 2,308 | 4,940 | 2.55 |
| Mar-May | 4,940 | --- | 4 | 4,944 | 464 | 1,089 | 350 | 1,904 | 3,040 | 2.45 |
| Jun-Aug | 3,040 | --- | 2 | 3,042 | 470 | 870 | 394 | 1,734 | 1,308 | 2.12 |
| Mkt. yr. | 883 | 9,207 | 9 | 10,099 | 1,782 | 5,505 | 1,504 | 8,791 | 1,308 | 2.43 |
| 1998/99 | | | | | | | | | | |
| Sep-Nov | 1,308 | 9,761 | 3 | 11,072 | 444 | 2,128 | 450 | 3,022 | 8,050 | 1.91 |
| Mkt. yr. | 1,308 | 9,761 | 10 | 11,079 | 1,870 | 5,700 | 1,700 | 9,270 | 1,809 | 1.80-2.10 |

Table 1--Feed Grains: Marketing year supply and disappearance, (cont.) 1/

| Year/ Qtr. | Beg. stocks | Produc- tion | Im- ports | Supply | FSI | Feed & resid. | Ex- ports | Total disp. | End. stks. | Farm price |
|---------------|-------------|-----------------|--------------|--------|-----|------------------|--------------|----------------|---------------|---------------|
| SORGHUM | | | | | | | | | | |
| 1992/93 | | | | | | | | | | |
| Sep-Nov | 53 | 875 | 0 | 928 | 6 | 261 | 56 | 324 | 604 | 1.85 |
| Dec-Feb | 604 | --- | 0 | 604 | 6 | 63 | 101 | 170 | 434 | 1.86 |
| Mar-May | 434 | --- | 0 | 434 | 4 | 78 | 87 | 170 | 265 | 1.89 |
| Jun-Aug | 265 | --- | 0 | 265 | 3 | 55 | 32 | 90 | 175 | 2.07 |
| Mkt. yr. | 53 | 875 | 0 | 928 | 19 | 457 | 277 | 753 | 175 | 1.89 |
| 1993/94 | | | | | | | | | | |
| Sep-Nov | 175 | 534 | 0 | 709 | 6 | 218 | 39 | 263 | 446 | 2.22 |
| Dec-Feb | 446 | --- | 0 | 446 | 6 | 103 | 60 | 170 | 276 | 2.59 |
| Mar-May | 276 | --- | 0 | 276 | 5 | 80 | 64 | 148 | 128 | 2.39 |
| Jun-Aug | 128 | --- | 0 | 128 | 3 | 40 | 38 | 81 | 48 | 2.10 |
| Mkt. yr. | 175 | 534 | 0 | 709 | 20 | 440 | 202 | 662 | 48 | 2.31 |
| 1994/95 | | | | | | | | | | |
| Sep-Nov | 48 | 646 | 0 | 693 | 7 | 200 | 64 | 271 | 422 | 1.91 |
| Dec-Feb | 422 | --- | 0 | 422 | 8 | 73 | 61 | 142 | 281 | 2.02 |
| Mar-May | 281 | --- | 0 | 281 | 5 | 63 | 54 | 122 | 159 | 2.18 |
| Jun-Aug | 159 | --- | 0 | 159 | 3 | 41 | 43 | 87 | 72 | 2.64 |
| Mkt. yr. | 48 | 646 | 0 | 693 | 22 | 377 | 223 | 622 | 72 | 2.13 |
| 1995/96 | | | | | | | | | | |
| Sep-Nov | 72 | 459 | 0 | 530 | 5 | 170 | 54 | 229 | 301 | 2.88 |
| Dec-Feb | 301 | --- | 0 | 301 | 6 | 66 | 67 | 139 | 163 | 3.25 |
| Mar-May | 163 | --- | 0 | 163 | 5 | 51 | 36 | 92 | 70 | 3.94 |
| Jun-Aug | 70 | --- | 0 | 70 | 3 | 8 | 41 | 52 | 18 | 3.63 |
| Mkt. yr. | 72 | 459 | 0 | 530 | 19 | 295 | 198 | 512 | 18 | 3.19 |
| 1996/97 | | | | | | | | | | |
| Sep-Nov | 18 | 795 | 0 | 814 | 15 | 276 | 56 | 346 | 467 | 2.45 |
| Dec-Feb | 467 | --- | 0 | 467 | 15 | 119 | 59 | 193 | 274 | 2.26 |
| Mar-May | 274 | --- | 0 | 274 | 10 | 85 | 61 | 155 | 119 | 2.41 |
| Jun-Aug | 119 | --- | 0 | 119 | 6 | 37 | 29 | 72 | 47 | 2.27 |
| Mkt. yr. | 18 | 795 | 0 | 814 | 45 | 516 | 205 | 766 | 47 | 2.34 |
| 1997/98 | | | | | | | | | | |
| Sep-Nov | 47 | 634 | 0 | 681 | 18 | 239 | 49 | 307 | 374 | 2.26 |
| Dec-Feb | 374 | --- | 0 | 374 | 18 | 38 | 83 | 139 | 235 | 2.24 |
| Mar-May | 235 | --- | 0 | 235 | 12 | 71 | 55 | 139 | 96 | 2.16 |
| Jun-Aug | 96 | --- | 0 | 96 | 6 | 17 | 24 | 47 | 49 | 2.08 |
| Mkt. yr. | 47 | 634 | 0 | 681 | 55 | 365 | 212 | 632 | 49 | 2.21 |
| 1998/99 | | | | | | | | | | |
| Sep-Nov | 49 | 520 | 0 | 569 | 15 | 180 | 40 | 235 | 334 | 1.68 |
| Mkt. yr. | 49 | 520 | 0 | 569 | 45 | 275 | 195 | 515 | 54 | 1.60-1.90 |

Table 1--Feed Grains: Marketing year supply and disappearance, (cont.) 1/

| Year/ Qtr. | Beg. stocks | Produc- tion | Im- ports | Supply | FSI | Feed & resid. | Ex- ports | Total disp. | End. stks. | Farm price |
|---------------------------|----------------|-----------------|--------------|--------|-----|------------------|--------------|----------------|---------------|---------------|
| -----Million bushels----- | | | | | | | | | | |
| BARLEY | | | | | | | | | | |
| 1992/93 | | | | | | | | | | |
| Jun-Aug | 129 | 455 | 7 | 590 | 43 | 111 | 18 | 172 | 418 | 2.16 |
| Sep-Nov | 418 | --- | 2 | 420 | 37 | 14 | 22 | 73 | 347 | 1.92 |
| Dec-Feb | 347 | --- | 1 | 348 | 37 | 45 | 22 | 104 | 244 | 2.01 |
| Mar-May | 244 | --- | 2 | 246 | 56 | 21 | 18 | 95 | 151 | 2.02 |
| Mkt. yr. | 129 | 455 | 11 | 595 | 173 | 191 | 80 | 444 | 151 | 2.04 |
| 1993/94 | | | | | | | | | | |
| Jun-Aug | 151 | 398 | 3 | 552 | 44 | 91 | 15 | 150 | 403 | 1.91 |
| Sep-Nov | 403 | --- | 11 | 413 | 38 | 27 | 15 | 80 | 333 | 2.02 |
| Dec-Feb | 333 | --- | 24 | 357 | 35 | 86 | 12 | 133 | 224 | 2.19 |
| Mar-May | 224 | --- | 34 | 258 | 54 | 41 | 24 | 119 | 139 | 2.24 |
| Mkt. yr. | 151 | 398 | 71 | 621 | 172 | 244 | 66 | 482 | 139 | 1.99 |
| 1994/95 | | | | | | | | | | |
| Jun-Aug | 139 | 375 | 24 | 538 | 45 | 120 | 20 | 186 | 352 | 2.00 |
| Sep-Nov | 352 | --- | 14 | 366 | 37 | 31 | 19 | 87 | 279 | 1.98 |
| Dec-Feb | 279 | --- | 14 | 292 | 38 | 51 | 11 | 99 | 193 | 2.05 |
| Mar-May | 193 | --- | 14 | 207 | 52 | 26 | 17 | 95 | 113 | 2.15 |
| Mkt. yr. | 139 | 375 | 66 | 580 | 173 | 228 | 66 | 467 | 113 | 2.03 |
| 1995/96 | | | | | | | | | | |
| Jun-Aug | 113 | 359 | 12 | 484 | 44 | 111 | 17 | 171 | 313 | 2.53 |
| Sep-Nov | 313 | --- | 8 | 321 | 39 | 28 | 11 | 78 | 243 | 2.80 |
| Dec-Feb | 243 | --- | 8 | 251 | 37 | 17 | 20 | 73 | 178 | 3.18 |
| Mar-May | 178 | --- | 12 | 190 | 52 | 23 | 16 | 91 | 100 | 3.29 |
| Mkt. yr. | 113 | 359 | 41 | 513 | 172 | 179 | 62 | 413 | 100 | 2.89 |
| 1996/97 | | | | | | | | | | |
| Jun-Aug | 100 | 392 | 9 | 501 | 44 | 136 | 7 | 187 | 314 | 3.11 |
| Sep-Nov | 314 | --- | 8 | 322 | 39 | 25 | 12 | 76 | 246 | 2.74 |
| Dec-Feb | 246 | --- | 8 | 254 | 37 | 38 | 7 | 82 | 173 | 2.55 |
| Mar-May | 173 | --- | 11 | 184 | 53 | 18 | 4 | 75 | 109 | 2.33 |
| Mkt. yr. | 100 | 392 | 37 | 529 | 172 | 217 | 31 | 419 | 109 | 2.74 |
| 1997/98 | | | | | | | | | | |
| Jun-Aug | 109 | 360 | 12 | 482 | 44 | 87 | 24 | 155 | 327 | 2.31 |
| Sep-Nov | 327 | --- | 7 | 334 | 39 | 12 | 39 | 90 | 244 | 2.45 |
| Dec-Feb | 244 | --- | 8 | 252 | 37 | 29 | 6 | 72 | 180 | 2.42 |
| Mar-May | 180 | --- | 13 | 193 | 53 | 16 | 5 | 74 | 119 | 2.26 |
| Mkt. yr. | 109 | 360 | 40 | 510 | 172 | 144 | 74 | 390 | 119 | 2.38 |
| 1998/99 | | | | | | | | | | |
| Jun-Aug | 119 | 352 | 7 | 479 | 44 | 101 | 8 | 153 | 326 | 2.02 |
| Sep-Nov | 326 | --- | 7 | 333 | 39 | 24 | 8 | 71 | 262 | 1.97 |
| Mkt. yr. | 119 | 352 | 30 | 502 | 172 | 185 | 30 | 387 | 115 | 1.85-2.05 |

Table 1--Feed Grains: Marketing year supply and disappearance, (cont.) 1/

| Year/ Qtr. | Beg. stocks | Production | Imports | Supply | FSI | Feed & resid. | Exports | Total disp. | End. stks. | Farm price |
|---------------|-------------|------------|---------|--------|-----|---------------|---------|-------------|------------|------------|
| OATS | | | | | | | | | | |
| 1992/93 | | | | | | | | | | |
| Jun-Aug | 128 | 294 | 15 | 437 | 23 | 119 | 1.0 | 142 | 295 | 1.29 |
| Sep-Nov | 295 | --- | 12 | 307 | 22 | 40 | 2.1 | 64 | 242 | 1.30 |
| Dec-Feb | 242 | --- | 11 | 253 | 20 | 57 | 1.4 | 78 | 175 | 1.40 |
| Mar-May | 175 | --- | 17 | 192 | 31 | 47 | 1.3 | 79 | 113 | 1.46 |
| Mkt. yr. | 128 | 294 | 55 | 477 | 95 | 263 | 5.7 | 364 | 113 | 1.32 |
| 1993/94 | | | | | | | | | | |
| Jun-Aug | 113 | 207 | 17 | 337 | 23 | 93 | 1.5 | 118 | 219 | 1.35 |
| Sep-Nov | 219 | --- | 35 | 254 | 22 | 38 | 0.7 | 60 | 194 | 1.33 |
| Dec-Feb | 194 | --- | 31 | 225 | 20 | 58 | 0.5 | 79 | 147 | 1.42 |
| Mar-May | 147 | --- | 24 | 170 | 29 | 36 | 0.2 | 65 | 106 | 1.39 |
| Mkt. yr. | 113 | 207 | 107 | 427 | 93 | 225 | 3.0 | 321 | 106 | 1.36 |
| 1994/95 | | | | | | | | | | |
| Jun-Aug | 106 | 229 | 20 | 355 | 23 | 112 | 0.2 | 135 | 220 | 1.19 |
| Sep-Nov | 220 | --- | 34 | 254 | 22 | 40 | 0.2 | 62 | 192 | 1.19 |
| Dec-Feb | 192 | --- | 23 | 215 | 20 | 46 | 0.4 | 66 | 149 | 1.21 |
| Mar-May | 149 | --- | 16 | 165 | 27 | 37 | 0.2 | 64 | 101 | 1.36 |
| Mkt. yr. | 106 | 229 | 93 | 428 | 92 | 234 | 1.0 | 327 | 101 | 1.22 |
| 1995/96 | | | | | | | | | | |
| Jun-Aug | 101 | 161 | 28 | 289 | 23 | 86 | 0.4 | 109 | 180 | 1.48 |
| Sep-Nov | 180 | --- | 26 | 206 | 22 | 31 | 0.5 | 53 | 153 | 1.52 |
| Dec-Feb | 153 | --- | 18 | 171 | 20 | 38 | 0.3 | 58 | 113 | 1.94 |
| Mar-May | 113 | --- | 9 | 122 | 27 | 28 | 0.8 | 56 | 66 | 2.21 |
| Mkt. yr. | 101 | 161 | 81 | 342 | 92 | 182 | 2.1 | 276 | 66 | 1.67 |
| 1996/97 | | | | | | | | | | |
| Jun-Aug | 66 | 153 | 6 | 226 | 24 | 69 | 1.0 | 94 | 132 | 2.08 |
| Sep-Nov | 132 | --- | 39 | 171 | 22 | 22 | 0.8 | 45 | 126 | 1.84 |
| Dec-Feb | 126 | --- | 28 | 154 | 20 | 37 | 0.3 | 58 | 96 | 1.79 |
| Mar-May | 96 | --- | 24 | 120 | 29 | 24 | 0.4 | 53 | 67 | 1.88 |
| Mkt. yr. | 66 | 153 | 97 | 317 | 95 | 153 | 2.5 | 250 | 67 | 1.96 |
| 1997/98 | | | | | | | | | | |
| Jun-Aug | 67 | 167 | 19 | 253 | 24 | 74 | 0.4 | 98 | 155 | 1.62 |
| Sep-Nov | 155 | --- | 38 | 193 | 22 | 26 | 0.7 | 49 | 144 | 1.54 |
| Dec-Feb | 144 | --- | 26 | 170 | 20 | 38 | 0.5 | 59 | 111 | 1.59 |
| Mar-May | 111 | --- | 15 | 127 | 29 | 23 | 0.5 | 53 | 74 | 1.60 |
| Mkt. yr. | 67 | 167 | 98 | 332 | 95 | 161 | 2.1 | 258 | 74 | 1.60 |
| 1998/99 | | | | | | | | | | |
| Jun-Aug | 74 | 167 | 28 | 269 | 24 | 83 | 0.5 | 107 | 162 | 1.15 |
| Sep-Nov | 162 | --- | 35 | 197 | 22 | 31 | 0.5 | 53 | 143 | 1.08 |
| Mkt. yr. | 74 | 167 | 100 | 341 | 95 | 165 | 2.0 | 262 | 79 | 1.05-1.15 |

Totals may not add due to rounding.

1/ Corn and sorghum are on a September 1 to August 31 marketing year.

Barley and oats are on a June 1 to May 31 marketing year.

Table 2--Feed and residual use of wheat and coarse grains

| Year Beginning September 1 | Corn | Sorg. | Barley | Oats | Feed Grains | Wheat | Total grains | Animal Units | Feed/ animal unit |
|----------------------------------|---------------------------------|-------|--------|-------|----------------|-------|-----------------|-----------------|-------------------------|
| | ----- Million metric tons ----- | | | | | | | Mil. | Tons |
| 1992/93 | | | | | | | | | |
| Sep-Nov | 46.1 | 6.6 | 0.3 | 0.6 | 53.6 | -2.2 | 51.4 | | |
| Dec-Feb | 35.6 | 1.6 | 1.0 | 0.9 | 39.0 | 0.1 | 39.1 | | |
| Mar-May | 29.1 | 2.0 | 0.5 | 0.7 | 32.3 | -2.0 | 30.2 | | |
| Jun-Aug | 22.6 | 1.4 | 2.0 | 1.4 | 27.4 | 8.1 | 35.5 | | |
| Mkt. yr. | 133.4 | 11.6 | 3.7 | 3.6 | 152.3 | 3.9 | 156.2 | 82.7 | 1.89 |
| % Change | 9.5 | 25.0 | -25.6 | -7.2 | 8.8 | -37.9 | 6.8 | 2.5 | 4.14 |
| 1993/94 | | | | | | | | | |
| Sep-Nov | 43.2 | 5.5 | 0.6 | 0.6 | 50.0 | -1.0 | 48.9 | | |
| Dec-Feb | 31.5 | 2.6 | 1.9 | 0.9 | 36.9 | 1.1 | 38.0 | | |
| Mar-May | 24.1 | 2.0 | 0.9 | 0.6 | 27.6 | -0.7 | 27.0 | | |
| Jun-Aug | 20.1 | 1.0 | 2.6 | 1.7 | 25.4 | 10.2 | 35.6 | | |
| Mkt. yr. | 119.0 | 11.2 | 6.0 | 3.8 | 140.0 | 9.6 | 149.5 | 84.0 | 1.78 |
| % Change | -10.8 | -3.7 | 60.1 | 6.4 | -8.1 | 145.2 | -4.3 | 1.5 | -5.7 |
| 1994/95 | | | | | | | | | |
| Sep-Nov | 49.9 | 5.1 | 0.7 | 0.7 | 56.3 | -0.8 | 55.6 | | |
| Dec-Feb | 38.0 | 1.9 | 1.1 | 0.7 | 41.7 | 0.7 | 42.3 | | |
| Mar-May | 29.5 | 1.6 | 0.6 | 0.6 | 32.3 | -0.8 | 31.5 | | |
| Jun-Aug | 21.6 | 1.0 | 2.4 | 1.3 | 26.3 | 8.3 | 34.6 | | |
| Mkt. yr. | 139.0 | 9.6 | 4.76 | 3.3 | 156.6 | 7.4 | 164.0 | 84.3 | 1.94 |
| % Change | 16.8 | -14.3 | -20.0 | -14.1 | 11.9 | -22.4 | 9.7 | 0.4 | 9.2 |
| 1995/96 | | | | | | | | | |
| Sep-Nov | 45.3 | 4.3 | 0.6 | 0.5 | 50.7 | -2.7 | 48.1 | | |
| Dec-Feb | 34.2 | 1.7 | 0.4 | 0.6 | 36.9 | 0.4 | 37.2 | | |
| Mar-May | 26.6 | 1.3 | 0.5 | 0.4 | 28.8 | -1.8 | 27.0 | | |
| Jun-Aug | 13.5 | 0.2 | 3.0 | 1.0 | 17.7 | 10.3 | 27.9 | | |
| Mkt. yr. | 119.6 | 7.5 | 4.4 | 2.6 | 134.1 | 6.2 | 140.2 | 84.9 | 1.65 |
| % Change | -13.9 | -21.7 | -6.8 | -22.2 | -14.4 | -17.2 | -14.5 | 0.7 | -15.1 |
| 1996/97 | | | | | | | | | |
| Sep-Nov | 48.0 | 7.0 | 0.5 | 0.4 | 56.0 | -2.1 | 53.9 | | |
| Dec-Feb | 37.9 | 3.0 | 0.8 | 0.6 | 42.4 | 0.8 | 43.2 | | |
| Mar-May | 28.1 | 2.1 | 0.4 | 0.4 | 31.0 | -0.7 | 30.4 | | |
| Jun-Aug | 20.7 | 0.9 | 1.9 | 1.1 | 24.6 | 9.6 | 34.2 | | |
| Mkt. yr. | 134.7 | 13.1 | 3.6 | 2.6 | 154.0 | 7.7 | 161.7 | 85.3 | 1.90 |
| % Change | 12.6 | 74.8 | -17.9 | 1.0 | 14.9 | 24.8 | 15.3 | 0.4 | 14.8 |
| 1997/98 | | | | | | | | | |
| Sep-Nov | 51.7 | 6.1 | 0.3 | 0.5 | 58.5 | -3.1 | 55.5 | | |
| Dec-Feb | 38.3 | 1.0 | 0.6 | 0.6 | 40.6 | -0.0 | 40.5 | | |
| Mar-May | 27.7 | 1.8 | 0.3 | 0.4 | 30.2 | 0.3 | 30.5 | | |
| Jun-Aug | 22.1 | 0.4 | 2.2 | 1.3 | 26.0 | 11.6 | 37.7 | | |
| Mkt. yr. | 139.8 | 9.3 | 3.4 | 2.8 | 155.3 | 8.8 | 164.1 | 87.8 | 1.87 |
| % Change | 3.8 | -29.2 | -5.4 | 7.5 | 0.9 | 14.5 | 1.5 | 3.0 | -1.5 |
| 1998/99 | | | | | | | | | |
| Sep-Nov | 54.1 | 4.6 | 0.5 | 0.5 | 59.7 | -2.4 | 57.3 | | |
| Mkt. yr. | 144.8 | 7.0 | 4.6 | 2.7 | 159.0 | 7.4 | 166.5 | 87.6 | 1.90 |
| % Change | 3.5 | -24.7 | 32.0 | -2.6 | 2.4 | -15.6 | 1.4 | -0.2 | 1.7 |

Table 3--Cash feed grain prices

| | Corn, No. 2, Yel, Ctrl. IL 1/ | Corn, No. 2, Yel, Gulf ports 1/ | Sorghum, No. 2, Yel Texas South Panhandle 1/ | Sorghum, No. 2, Yel, Gulf ports 1/ | Barley, No. 2, feed, Duluth 2/ | Barley, No. 3 or better, Malting, Minn. 2/ | Oats, No. 2, Heavy white, Minn. 2/ |
|----------|--|--|---|---|--|---|---|
| Mkt. yr. | \$/bu | \$/bu | \$/cwt | \$/cwt | \$/bu | \$/bu | \$/bu |
| 94/95 | 2.34 | 2.78 | 4.75 | 4.62 | 2.02 | 2.75 | 1.36 |
| 95/96 | 3.91 | 4.30 | 7.30 | 7.19 | 2.67 | 3.69 | 2.28 |
| 96/97 | 2.74 | 3.07 | 5.02 | 5.03 | 2.32 | 3.18 | 2.03 |
| 97/98 | 2.45 | 2.78 | 4.72 | 4.76 | 1.90 | 2.50 | 1.70 |
| Monthly: | | | | | | | |
| 1997: | | | | | | | |
| Aug | 2.60 | 2.86 | 4.97 | 4.71 | 2.10 | 2.66 | 1.80 |
| Sep | 2.61 | 2.88 | 4.81 | 4.69 | 2.29 | 2.74 | 1.78 |
| Oct | 2.66 | 3.05 | 4.91 | 5.16 | 2.05 | 2.74 | 1.75 |
| Nov | 2.70 | 2.98 | 4.91 | 5.09 | 1.98 | NQ | 1.65 |
| 1998: | | | | | | | |
| Aug | 1.86 | 2.24 | 4.15 | 4.13 | NQ | 2.30 | 1.21 |
| Sep | 1.78 | 2.18 | 3.83 | 3.84 | NQ | NQ | 1.30 |
| Oct | 1.94 | 2.43 | 4.01 | 4.00 | NQ | NQ | 1.29 |
| Nov | 2.09 | 2.47 | 4.14 | 4.15 | NQ | NQ | 1.32 |

1/ Marketing year beginning September 1.

2/ Marketing year beginning June 1. NQ = No quote.

Table 4--Selected feed and feed by-product prices

| | Soybean meal 44% slv. Decatur, IL 1/ | Cotton- seed meal, 41% slv. Memphis 1/ | Corn gluten feed, IL pts. 1/ | Corn gluten meal, IL pts. 1/ | Meat & bone meal, Central U.S. 1/ | Dists.' dried grains, Lawrence- burg, IN 1/ | Wheat midlgs, Kansas City 1/ | Alfalfa farm price 2/ |
|----------|---|---|---|---|--|--|--|--------------------------------|
| Mkt. yr. | \$/ton | | | | | | | |
| 94/95 | 151.77 | 112.64 | 82.77 | 221.95 | 170.51 | 106.70 | 65.04 | 92.10 |
| 95/96 | 217.27 | 186.12 | 116.47 | 319.35 | 222.07 | 151.37 | 118.08 | 87.20 |
| 96/97 | 260.37 | 191.47 | 93.05 | 341.50 | 272.44 | 142.87 | 91.18 | 101.80 |
| 97/98 | 186.55 | 150.40 | 69.65 | 290.45 | 192.56 | 109.76 | 76.30 | 107.00 |
| Monthly: | | | | | | | | |
| 1997: | | | | | | | | |
| Aug | 261.60 | 176.25 | 75.50 | 345.60 | 261.00 | NQ | 69.80 | 105.00 |
| Sep | 265.70 | 192.00 | 81.10 | 355.00 | 272.10 | 130.00 | 80.30 | 106.00 |
| Oct | 216.00 | 189.10 | 73.75 | 343.75 | 260.40 | 128.75 | 89.40 | 106.00 |
| Nov | 231.60 | 189.10 | 73.25 | 351.25 | 221.10 | 133.00 | 101.50 | 107.00 |
| 1998: | | | | | | | | |
| Aug | 135.70 | 130.30 | 57.50 | 245.00 | 156.80 | 86.00 | 53.40 | 90.50 |
| Sep | 126.90 | 115.60 | 51.50 | 210.00 | 133.40 | NQ | 43.90 | 89.10 |
| Oct | 129.40 | 106.50 | 56.90 | 227.50 | 141.30 | 75.00 | 49.00 | 88.10 |
| Nov | 139.30 | 107.90 | 66.10 | 313.10 | 154.00 | 74.00 | 60.00 | 85.00 |

1/ Marketing year beginning September 1. NQ = No quote.

2/ Marketing year beginning May 1.

Table 5--Corn: Food, and industrial uses

| Year | HFCS | Glucose and dex. | Starch | ---Alcohol--- Fuel | Bev. & Mfg | Cereals & other products | Total F&I |
|-----------------|-------|------------------------|--------|-----------------------|---------------|--------------------------------|--------------|
| Million bushels | | | | | | | |
| 1995/96 | | | | | | | |
| Sep-Nov | 110.1 | 60.7 | 55.8 | 121.2 | 32.3 | 33.2 | 413.2 |
| Dec-Feb | 105.1 | 52.9 | 51.5 | 120.8 | 37.5 | 32.8 | 400.6 |
| Mar-May | 130.8 | 60.7 | 55.0 | 92.2 | 39.6 | 33.5 | 411.8 |
| Jun-Aug | 136.2 | 62.8 | 57.0 | 61.5 | 15.6 | 33.5 | 366.6 |
| Mkt year | 482.2 | 237.1 | 219.3 | 395.7 | 125.0 | 133.0 | 1,592.2 |
| 1996/97 | | | | | | | |
| Sep-Nov | 113.2 | 60.0 | 55.0 | 91.9 | 29.0 | 33.6 | 382.6 |
| Dec-Feb | 110.7 | 56.3 | 55.1 | 106.2 | 33.0 | 33.2 | 394.4 |
| Mar-May | 134.8 | 64.0 | 59.5 | 119.2 | 34.0 | 33.9 | 445.4 |
| Jun-Aug | 145.1 | 65.5 | 59.1 | 111.4 | 34.0 | 33.9 | 449.0 |
| Mkt year | 503.8 | 245.8 | 228.6 | 428.7 | 130.0 | 134.6 | 1,671.5 |
| 1997/98 | | | | | | | |
| Sep-Nov | 122.8 | 63.4 | 59.6 | 116.1 | 33.2 | 34.0 | 429.1 |
| Dec-Feb | 116.8 | 56.2 | 56.7 | 122.2 | 32.8 | 33.6 | 418.3 |
| Mar-May | 139.4 | 60.7 | 58.3 | 118.3 | 33.5 | 34.4 | 444.5 |
| Jun-Aug | 153.4 | 64.7 | 58.9 | 124.6 | 33.5 | 34.4 | 469.4 |
| Mkt year | 532.3 | 244.9 | 233.5 | 481.1 | 133.0 | 136.5 | 1,761.2 |
| 1998/99 | | | | | | | |
| Sep-Nov | 127.6 | 60.5 | 57.8 | 132.4 | 30.6 | 34.8 | 443.7 |
| Mkt year | 560.0 | 240.0 | 235.0 | 550.0 | 125.0 | 139.7 | 1,849.7 |

Table 6--Wholesale corn milling product and by-product prices

| | Corn meal, yellow, New York | Brewers' grits, Chicago | Sugar, destrose, Midwest | HFCS, 42% tank cars, Midwest | Corn starch, fob Midwest 3/ |
|-------------|-----------------------------------|-------------------------------|--------------------------------|------------------------------------|-----------------------------------|
| | \$/cwt | \$/cwt | cents/lb | cents/lb | \$/cwt |
| Mkt. yr. 1/ | | | | | |
| 94/95 | 13.22 | 10.67 | 25.62 | 12.27 | 12.43 |
| 95/96 | 17.79 | 14.21 | 25.50 | 13.01 | 15.98 |
| 96/97 | 16.94 | 12.85 | 25.50 | 13.15 | 13.83 |
| 97/98 2/ | 15.94 | 11.85 | 28.08 | 7.77 | 13.55 |
| Monthly | | | | | |
| 1997: | | | | | |
| Sep | 16.59 | 12.49 | 25.50 | NA | 13.45 |
| Oct | 16.73 | 12.63 | 25.50 | 8.30 | 13.70 |
| Nov | 16.50 | 12.40 | 25.50 | 8.30 | 13.80 |
| Dec | 16.26 | 12.16 | 25.50 | 8.30 | 14.05 |
| 1998: | | | | | |
| Sep | 14.58 | 10.48 | 30.65 | 7.14 | 11.92 |
| Oct | 14.89 | 10.99 | 30.65 | 7.40 | 11.71 |
| Nov | 15.07 | 10.97 | 30.65 | 7.65 | 11.32 |
| Dec 2/ | 14.94 | 10.84 | 30.65 | 7.80 | 11.32 |

1/ Marketing year beginning September 1.

2/ Preliminary.

3/ Bulk-industrial, unmodified. NA = Not Available.

Table 7--U.S. feed grain exports by selected destinations 1/

| Country/region | -----1996/97--- | | -----1997/98----- | | 1998/99 |
|--------------------|-----------------|---------|-------------------|---------|---------|
| | Mkt. yr. | Sep-Oct | Mkt. yr. | Sep-Oct | Sep-Oct |
| CORN | | | | | |
| Japan | 14,821 | 2,002 | 14,497 | 2,768 | 2,032 |
| Taiwan | 5,482 | 670 | 3,758 | 924 | 783 |
| Former USSR | 184 | 22 | 23 | 22 | 0 |
| South Africa | 81 | 0 | 0 | 0 | 0 |
| Sub-Saharan Africa | 272 | 26 | 336 | 23 | 40 |
| EU | 1,704 | 53 | 135 | 3 | 124 |
| Egypt | 2,292 | 285 | 1,808 | 411 | 523 |
| Canada | 833 | 160 | 1,423 | 225 | 182 |
| China | 53 | 0 | 212 | 0 | 97 |
| East Europe | 385 | 30 | 19 | 0 | 0 |
| Algeria | 869 | 118 | 861 | 210 | 154 |
| S. Korea | 5,369 | 763 | 3,484 | 439 | 608 |
| Mexico | 3,155 | 728 | 4,116 | 408 | 852 |
| Others | 10,081 | 1,360 | 7,444 | 1,143 | 1,772 |
| Total | 45,581 | 6,216 | 38,117 | 6,578 | 7,168 |
| SORGHUM | | | | | |
| Mexico | 2,111 | 393 | 3,222 | 299 | 393 |
| Japan | 2,102 | 310 | 1,650 | 469 | 154 |
| Others | 948 | 156 | 463 | 56 | 13 |
| Total | 5,161 | 859 | 5,334 | 824 | 560 |
| -----1996/97----- | | | | | |
| | Mkt. yr. | Jun-Oct | Mkt. yr. | Jun-Oct | 1998/99 |
| | | | | | Jun-Oct |
| BARLEY | | | | | |
| Saudi Arabia | 88 | 32 | 922 | 828 | 0 |
| Israel | 28 | 28 | 0 | 0 | 0 |
| Jordan | 50 | 50 | 53 | 0 | 0 |
| Japan | 175 | 93 | 290 | 191 | 216 |
| Mexico | 182 | 114 | 124 | 59 | 46 |
| Taiwan | 35 | 4 | 94 | 60 | 0 |
| Other | 220 | 57 | 135 | 74 | 46 |
| Total | 779 | 379 | 1,617 | 1212 | 308 |

1/ Totals may not add due to rounding. Source: Bureau of the Census

Table 8--U.S. imports by country of origin

| Country/region | -----1996/97--- | | -----1997/98----- | | 1998/99 |
|------------------|-----------------|---------|-------------------|---------|---------|
| | Mkt. yr. | Jun-Oct | Mkt. yr. | Jun-Oct | Jun-Oct |
| OATS | | | | | |
| Canada | 1,440 | 577 | 1,282 | 753 | 678 |
| Finland | 99 | 0 | 161 | 35 | 105 |
| Sweden | 140 | 0 | 176 | 22 | 212 |
| Total 1/ | 1,680 | 577 | 1,696 | 810 | 995 |
| BARLEY, MALTING | | | | | |
| Canada | 608 | 194 | 733 | 277 | 187 |
| Total 1/ | 609 | 194 | 733 | 277 | 187 |
| BARLEY, OTHER 2/ | | | | | |
| Canada | 191 | 68 | 112 | 65 | 62 |
| Total 1/ | 192 | 68 | 143 | 65 | 62 |

1/ Totals may not add due to rounding.

2/ Mainly consists of barley for feeding, and also includes seed barley.

Source: Bureau of the Census