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## FEED GRAIN PRODUCTION RECORD LARGE

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Based on August 1 surveys, the National Agricultural Statistics Service has forecast corn yield at record levels. Even with year-to-year declines in sorghum production, feed grain production is forecast at 275 million tons, down 8 million tons from last month, but up from 245 million in $2002 / 03$. Total use of feed grains in 2003/04 is expected to be record large, up 9 million tons from last year's 263 million, but down 4 million from last month. Ending stocks are down from last month but up from last year, resulting in stronger prices month-to-month but lower prices than last year.

World coarse grain production projected for 2003/04 dropped 17 million tons this month to 908 million. Foreign coarse grain production prospects fell over 9 million tons, with very hot, dry weather across much of Europe and spotty rains and high temperatures in parts of Canada. Foreign coarse grain consumption is projected down only 3 million tons this month as tight supplies of wheat for feeding and limited hay and pastures keep demand for feed grains relatively strong in the EU, Eastern Europe, and Canada. With the large production decline and small change in use, foreign coarse grain ending stocks are down 7.5 million tons this month to 77.7 million tons, the lowest since 1977/78. Tighter exporters' supplies are expected to limit sorghum, rye, and barley trade, so global 2003/04 coarse grain trade is down marginally this month. Higher expected corn prices and increased old-crop supplies in Brazil contributed to a reduction in expected 2003/04 September-August U.S. corn exports. Sharply reduced U.S. sorghum production cut export prospects.

Figure 1
Average farm prices received, 1982-2003
Dol./bu


Source: National Agricultural Statistics Service, USDA.
1/ Corn, sorghum, barley, and oats prices are projected at \$2.00-\$2.40, \$2.00-\$2.40, \$2.20-\$2.60, and $\$ 1.15-\$ 1.55$ respectively. The chart shows the mid-point of the range.

## Domestic Outlook

## Feed Grain Supply Largest Since 1994/1995

U.S. feed grain production in 2003 is forecast at 275 million metric tons, down 8 million from a month ago but up 30 million from 2002. This reflects adjustments for each of the feed grains. Feed grain supply in 2003/04 is forecast at 307 million tons, down 3 percent from last month, but 5 percent above 2002/03. Forecast beginning stocks are unchanged from last month, but down 36 percent from the previous year.

Total feed grain use is projected at 273 million tons in 2003/04, up 4 percent from the previous year. Domestic use of 221 million tons will top the record 218 million expected in 2002/03. Feed and residual use in 2003/04 is expected to total 152 million metric tons and account for 56 percent of total use.

When converted to a September-August marketing year, feed and residual use for the four feed grains plus wheat in 2003/04 is projected to total 157 million tons, unchanged from last month and essentially the same as in 2002/03. Corn is projected to account for 91 percent of the feed and residual use in 2003/04, down from 92 percent in 2002/03.

The projected index of grain consuming animal units (GCAU) for 2003/04 declined 1 percent from

Figure 2
Feed grain supply


2002/03's 88 million units. A projected decrease in beef production caused the slight decrease in GCAUs. The grain used per GCAU in 2003/04 would be 1.8 tons, unchanged from last month and also the same as in 2002/03.

## Record Corn Crop Forecast

Corn production in 2003 is forecast at a record 10.064 billion bushels, down 206 million from last month but 1 billion above last year. This is the first surveybased forecast of the season and it reflects August 1 conditions. The average corn yield is forecast at a record 139.9 bushels per acre, compared with last month's trend-adjusted projection of 142.7 bushels and the actual 2002 yield of 130 bushels. The August 1 survey data indicate a record level of stalk and ear counts for the combined seven objective yield States (Illinois, Indiana, Iowa, Minnesota, Nebraska, Ohio, and Wisconsin).

Estimated acreage of corn harvested for grain was cut 70,000 acres this month to 71.9 million, but is up 4 percent from 2002. This would be the largest grain harvested acreage since 2000. Cooler-than-normal temperatures in the eastern Corn Belt, resulted in crop conditions behind normal. As of August 10, 95 percent of the corn was in the silking stage or beyond, compared with 97 percent for the 5 -year average.

Figure 3
Feed grain ending stocks
Bil. bu


Source: National Agricultural Statistics Service, USDA.
Thirty-five percent of the acreage was in the dough
stage or beyond, compared with the average of 48 percent.

With a record 2003 production expected and record use only partially offsetting these gains, projected ending stocks decreased 156 million bushels from last month but are 174 million above 2002/03. Forecast corn use was decreased 50 million bushels from last month's forecast but is up 290 million bushels from the estimate for 2002/03. The year-over-year increase in corn use was the result of increased exports and food, seed, and industrial use (FSI), principally ethanol production. With a smaller corn crop expected than last month, prices will be stronger and ethanol production slightly lower, but still up 16 percent from expected 2002/03 use.

With increased corn supplies in 2003/04 and higher ending stocks, prices were reduced from last year. The forecast price for 2003/04 is $\$ 2.00-\$ 2.40$ per bushel, up from last month's $\$ 1.90-\$ 2.30$. In 2002/03, the season-average price received by farmers is expected to be $\$ 2.30$.

## Sorghum Crop To Increase From Last Year

The first survey-based forecast for sorghum indicates production of 448 million bushels in 2003, down 103 million from last month but up 79 million from last year. Plantings rose 300,000 acres from the July estimate and harvested acres increased 120,000 , as Texas producers planted land abandoned from cotton.

Figure 4
Corn production and yield
Bil. bu
Bu/acre


Source: National Agricultural Statistics Service, USDA.

Figure 5
U.S. corn area


Source: National Agricultural Statistics Service, USDA.
Yields in 2003 are forecast at 54.4 bushels per acre, down from the earlier projection (based on a simple linear trend fit over 1960-2002), but up from the 50.7 bushels in 2002.

Given smaller sorghum supplies, projected feed and residual use is down 40 million bushels from last month, but up 20 million from 2002/03. Exports were dropped 40 million bushels this month because of smaller supplies but are projected up 30 million from the prior marketing year. Ending stocks are projected to be about the same as 2002/03, but down 18 million from last month.

Figure 6
Sorghum production and yield


Source: National Agricultural Statistics Service, USDA.

In the 2002/03 marketing year, prices received by farmers for sorghum have averaged 97 percent of the corn price, down from 98 percent in 2001/02. The stronger prices have been in response to increased exports. Projected prices for 2002/03 are $\$ 2.33$ per bushel. The forecast price for sorghum in 2003/04 is $\$ 2.00-\$ 2.40$, the same as the corn price, up $\$ .35$ from last month as the supply and use balance for sorghum was tightened more than corn.

## Barley Production Increases

Barley production for 2003 is forecast at 281 million bushels, down 10 million from a month ago but up 24 percent from 2002. Yields are expected to average 57.5 bushels per acre, down 2 bushels from the July forecast but up 2.6 bushels from last year.

Total barley use in 2003/04 is projected down 2 percent from last month but up 29 million bushels from last year. The 2003/04 barley export projection was lowered this month to 25 million bushels because of lower production and higher prices.

Prices received by farmers for barley in 2003/04 are expected to average $\$ 2.20-\$ 2.60$ per bushel, vs. the $\$ 2.72$ in 2002/03, up 5 cents due to higher corn prices.

## Oats Production Increases

Figure 7
U.S. sorghum area


Source: National Agricultural Statistics Service, USDA.

The 2003 oats crop is forecast at 151 million bushels, up 3.45 million from the July forecast, and up 27 percent from 2002. The forecast yield, at 64.9 bushels per acre, is up 0.2 bushels from last month and up 8.1 bushels from last year. Area for harvest increased to 2.331 million acres, 45,000 acres above last month's estimate. The increased production raised total supplies and ending stocks of oats. Prices received by farmers in 2003/04 are expected to average between $\$ 1.15$ and $\$ 1.55$ per bushel, compared with the $\$ 1.81$ in 2002/03.

## All Hay Production To Increase

All hay production in 2003 is forecast at 160 million tons, up 9 million from 2002. The all hay yield is expected to be 2.49 tons per acre, up 6 percent from last year. Acreage harvested of all hay was unchanged this month from the June estimate but 118,000 acres less than 2002.

Alfalfa hay production, at 78 million tons, increased 6 percent from 2002. Yields are expected to average 3.31 tons per acre, up 0.12 tons from last year. In all but 9 States, yields were the same or above last year, with most areas receiving adequate moisture.

Other hay production is forecast at 82 million tons, up 6 percent from last year. Yields are expected to average 2.01 tons per acre, up from 1.86 in 2000, and if realized would be a record high. Harvested area, at 40.8 million acres, is down 1 percent from last year, but unchanged from the June estimate.

Figure 8
Hay production and yield


Source: National Agricultural Statistics Service, USDA.

Roughage consuming animal units (RCAUs) in 2003/04 are estimated to be down 1 percent from $2002 / 03$. Hay supply in 2003/04 is up, even with a slight decline in beginning stocks. Hay supply per RCAU is 2.54 tons, up from 2.4 tons in 2002/03.

Prices received by farmers for all hay averaged $\$ 94.27$ per ton in May-July 2003, down from \$97.47 in 2002.

Alfalfa hay prices in May-July 2003 averaged $\$ 97.87$ per ton, down from $\$ 104.00$ in 2002. Prices received by farmers for hay other than alfalfa and alfalfa mixtures averaged $\$ 81.43$ per ton during May-July 2003, up from $\$ 74.87$ in 2002.

## International Outlook

## Global Coarse Grains Production Plummets 17 Million Tons, Stock Prospects Drop

World coarse grain production prospects dropped 17 million tons this month to 908 million, with sharp reductions in U.S. crops accounting for less than half the decline. Record heat and generally dry conditions damaged production prospects across much of the EU and Eastern Europe. Foreign corn production dropped 6 million tons this month, with a 5.5 -million-ton drop in the EU and a 2.1-million-ton decline in Eastern Europe partly offset by a 2 -million-ton increase in corn production reported for India. Expected 2003/04 foreign barley production declined 2.5 million tons this month. EU barley prospects dropped 2.2 million tons and Canada's declined 1.0 million. The Canadian Prairies had hot temperatures, high winds, and spotty rains that reduced potential yields. There was a small reduction in the forecast of Canada's oats production. Rye production prospects declined in the EU and Eastern Europe.

World coarse grain consumption in 2003/04 is forecast down 4 million tons this month, but remains record large at 921 million tons. Foreign coarse grain consumption is projected down only 3 million tons this month as tight supplies of wheat for feeding and limited hay and pastures keep demand for feed grains relatively strong in the EU and Eastern Europe. The 1-million-ton decline in Mexico's coarse grain

Figure 9
World coarse grain production


Source: Foreign Agricultural Service, USDA.
consumption is caused by the expected replacement of sorghum imports by cracked corn imports. Exports of cracked corn are not considered as part of U.S. corn exports and Mexico's corn imports. With the large production decline and small change in use, foreign coarse grain ending stocks are down 7.5 million tons this month to 77.7 million tons, the lowest since 1977/78. EU coarse grain ending stocks for 2003/04 are projected down 6 million tons this month to 14 million, the lowest since 1995/96. Lower coarse grain stocks are also expected this month for Canada and Eastern Europe. World coarse grain ending stocks are forecast at 112 million tons, the lowest since 1975/76. The projected global stocks-touse ratio for 2003/04 is a record low 12.1 percent, slightly tighter than in 1973/74.

## U.S. 2003/04 Corn And Sorghum Export Prospects Decline This Month

U.S. sorghum export prospects were reduced 1 million tons this month because of reduced U.S. production prospects. Mexico is expected to import less sorghum and more cracked corn.

Expected U.S. corn exports were also reduced 1 million tons this month to 46 million because of higher U.S. prices and increased competition. Brazil's record 2002/03 corn crop was increased 1.5

Figure 10
World coarse grains ending stocks


Figure 11
Shares of global corn trade


Source: USDA.
million tons this month to 45 million tons. Government survey results indicate larger-thanexpected yields for the late harvest. Much of the lateharvested 2002/03 Brazilian corn crop is marketed during the 2003/04 October-September international marketing year. With corn prices in Brazil dropping, exports are expected to be competitive, as a few importers prefer Brazil's non-GMO corn. Brazil's 2003/04 October-September exports are forecast to reach a record 5 million tons, up 1.5 million from a month ago. With an increase this month in the forecast U.S. 2003/04 corn price, China's corn export projection was boosted 0.5 million tons to 8.5 million.

Corn exports by Eastern Europe are forecast down almost 1 million tons this month because of reduced production prospects in Hungary and Romania. The forecast of EU 2003/04 corn imports increased 0.5 million tons this month to 3.5 million as tight supplies of grain for feeding make imports attractive. The increase in EU imports was offset by a reduction in projected corn imports by Turkey. Turkey is taking large shipments of corn as 2002/03 ends, but much of these late shipments will be carried into 2003/04, boosting supplies and reducing the need to import during 2003/04.

Argentina's 2002/03 October-September corn exports were boosted 1.0 million tons due to the rapid pace of old-crop sales. The forecast of Brazil's 2002/03 corn exports also increased because of large supplies and competitive prices. However, corn exports from South Africa were reduced as the pace of sales has been slow. Imports for Turkey were increased 0.4 million tons. Recent storm damage to the 2003 corn crop in the Philippines results in an increase in imports of 0.3 million tons, but these imports are expected prior to the beginning of the 2003/04 October-September trade year.

World corn trade in 2002/03 is forecast to reach 77.5 million tons, nearly matching the 1980/81 record. Global corn trade is expected to decline in 2003/04 due to reduced imports expected for Canada, with a bigger corn crop; Turkey, carrying in large stocks; and Japan, where meat imports are expected to reduce meat production.
U.S. corn exports for 2002/03 October-September remain this month forecast at 41 million tons, down 13 percent from the previous year. According to Census, corn exports from October 2002 through May 2003 reached 27 million tons, down 13 percent compared with a year earlier. According to Grain Inspections, June and July 2003 exports reached 6.5 million tons, down 19 percent from a year ago. According to Export Sales, at the end of July, outstanding sales of corn reached nearly 3.9 million tons, down 16 percent compared with the previous year. The inspections and export sales data indicate acceleration is expected in corn sales and shipments compared with a year ago in the final months of 2002/03.

## Contacts and Links

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## Data

The Feed Grains Data Delivery System (http://www.ers.usda.gov/db/feedgrains/) is a queryable database that contains monthly, quarterly, and annual data on prices, supply, and use of corn and other feed grains. This includes data published in the monthly Feed Outlook and the annual Feed Yearbook reports.

## Recent Reports From the Economic Research Service

The 2002 Farm Act: Provisions and Implications for Commodity Markets provides an initial assessment of the legislation's effects on agricultural production, commodity markets, and net farm income over the next 10 years. The report is available at http://www.ers.usda.gov/publications/aib778/.

The 2002 Farm Bill: Provisions and Economic Implications, a side-by-side comparison of the new farm bill with 1996-2001 farm legislation, is available at http://www.ers.usda.gov/Features/FamBill/.

Agricultural Productivity and Efficiency in Russia and Ukraine: Building on a Decade of Reform (http://www.ers.usda.gov/publications/aer813/) reviews the evidence on the productivity of agricultural production and explores some of the causes of inefficient practices. Implementing institutional reforms would allow productivity and efficiency in the agricultural sector to improve.

## Related Websites

WASDE (http://www.usda.gov/oce/waob/wasde/latest.pdf)
Grain Circular (http://www.fas.usda.gov/grain/circular/2003/08-03/graintoc.htm)
World Agricultural Production (http://www.fas.usda.gov/wap/circular/2003/03-08/toc.html)
Corn Briefing Room (http://www.ers.usda.gov/briefing/corn/)

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


| Sorghum: |  |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2000/01 |  |  |  |  |  |  |  |  |  |  |
| Sep-Nov | 65 | 471 | 0 | 536 | 17 | 194 | 63 | 274 | 262 | 1.69 |
| Dec-Feb | 262 | --- | 0 | 262 | 11 | 15 | 69 | 95 | 167 | 1.95 |
| Mar-May | 167 | -- | 0 | 167 | 4 | 23 | 63 | 91 | 76 | 1.79 |
| June-Aug | 76 | -- | 0 | 76 | 3 | -10 | 42 | 35 | 42 | 2.03 |
| Mkt. yr. | 65 | 471 | 0 | 536 | 35 | 222 | 237 | 494 | 42 | 1.89 |
| 2001/02 |  |  |  |  |  |  |  |  |  |  |
| Sep-Nov | 42 | 515 | 0 | 556 | 15 | 164 | 63 | 242 | 314 | 1.86 |
| Dec-Feb | 314 | --- | 0 | 314 | 15 | 26 | 78 | 120 | 194 | 1.84 |
| Mar-May | 194 | -- | 0 | 194 | 10 | 26 | 53 | 89 | 105 | 1.78 |
| June-Aug | 105 | -- | 0 | 105 | 5 | -8 | 47 | 45 | 61 | 2.25 |
| Mkt. yr. | 42 | 515 | 0 | 556 | 45 | 208 | 242 | 495 | 61 | 1.94 |
| 2002/03 |  |  |  |  |  |  |  |  |  |  |
| Sep-Nov | 61 | 370 | 0 | 431 | 15 | 133 | 51 | 199 | 232 | 2.42 |
| Dec-Feb | 232 | ---- | 0 | 232 | 15 | 7 | 47 | 69 | 163 | 2.31 |
| Mar-May | 163 | -- | 0 | 163 | 10 | 31 | 40 | 81 | 82 | 2.22 |
| Mkt. yr. | 61 | 370 | 0 | 431 | 45 | 165 | 180 | 390 | 41 | 2.33 |
| 2003/04 |  |  |  |  |  |  |  |  |  |  |
| Mkt. yr. | 41 | 448 | 0 | 489 | 50 | 185 | 210 | 445 | 44 | $2.00-2.40$ |

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

| Year/ Qtr. | $\begin{array}{r} \text { Beg. } \\ \text { stocks } \end{array}$ | Production | $\begin{array}{r} \text { Im- } \\ \text { ports } \end{array}$ | Supply | FSI | Feed \& resid. | $\begin{array}{r} \text { Ex- } \\ \text { ports } \end{array}$ | Total disp. | End. <br> stocks | Farm price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Barley: |  |  |  | ------Million bushels---- |  |  |  |  |  | \$/bu |
| 2000/01 |  |  |  |  |  |  |  |  |  |  |
| June-Aug | 111 | 319 | 7 | 437 | 44 | 91 | 8 | 143 | 294 | 2.28 |
| Sep-Nov | 294 | --- | 5 | 299 | 39 | 6 | 25 | 70 | 229 | 1.95 |
| Dec-Feb | 229 | --- | 8 | 237 | 37 | 22 | 16 | 75 | 162 | 2.10 |
| Mar-May | 162 | --- | 9 | 171 | 52 | 4 | 9 | 65 | 106 | 2.08 |
| Mkt. yr. | 111 | 319 | 29 | 459 | 172 | 123 | 58 | 353 | 106 | 2.11 |
| 2001/02 |  |  |  |  |  |  |  |  |  |  |
| June-Aug | 106 | 249 | 8 | 364 | 44 | 63 | 11 | 118 | 245 | 2.24 |
| Sep-Nov | 245 | --- | 5 | 250 | 39 | 9 | 7 | 55 | 195 | 2.27 |
| Dec-Feb | 195 | --- | 6 | 201 | 37 | 17 | 5 | 59 | 142 | 2.15 |
| Mar-May | 142 | --- | 5 | 147 | 52 | -1 | 3 | 54 | 93 | 2.16 |
| Mkt. yr. | 106 | 249 | 24 | 380 | 172 | 88 | 26 | 287 | 93 | 2.22 |
| 2002/03 |  |  |  |  |  |  |  |  |  |  |
| June-Aug | 93 | 227 | 9 | 329 | 44 | 54 | 7 | 105 | 224 | 2.45 |
| Sep-Nov | 224 | --- | 3 | 227 | 39 | 11 | 7 | 57 | 170 | 2.68 |
| Dec-Feb | 170 | --- | 5 | 175 | 37 | 6 | 8 | 51 | 123 | 2.88 |
| Mar-May | 123 | --- | 2 | 125 | 53 | -6 | 9 | 56 | 69 | 2.85 |
| Mkt. yr. | 93 | 227 | 18 | 338 | 173 | 66 | 30 | 269 | 69 | 2.72 |
| 2003/04 |  |  |  |  |  |  |  |  |  |  |
| Mkt. yr. | 69 | 281 | 30 | 381 | 173 | 100 | 25 | 298 | 83 | 2.20-2.60 |
| Oats: |  |  |  |  |  |  |  |  |  |  |
| 2000/01 |  |  |  |  |  |  |  |  |  |  |
| June-Aug | 76 | 150 | 21 | 247 | 17 | 79 | 0 | 96 | 150 | 1.03 |
| Sep-Nov | 150 | --- | 37 | 187 | 16 | 26 | 0 | 43 | 144 | 1.04 |
| Dec-Feb | 144 | --- | 28 | 172 | 14 | 48 | 0 | 62 | 110 | 1.22 |
| Mar-May | 110 | --- | 20 | 130 | 21 | 36 | 0 | 57 | 73 | 1.27 |
| Mkt. yr. | 76 | 150 | 106 | 332 | 68 | 189 | 1.7 | 259 | 73 | 1.10 |
| 2001/02 |  |  |  |  |  |  |  |  |  |  |
| June-Aug | 73 | 117 | 18 | 207 | 17 | 73 | 1 | 91 | 116 | 1.29 |
| Sep-Nov | 116 | --- | 48 | 165 | 17 | 33 | 1 | 50 | 114 | 1.59 |
| Dec-Feb | 114 | --- | 18 | 132 | 15 | 23 | 1 | 39 | 93 | 1.92 |
| Mar-May | 93 | --- | 12 | 105 | 24 | 18 | 0 | 42 | 63 | 1.99 |
| Mkt. yr. | 73 | 117 | 96 | 286 | 72 | 148 | 2.8 | 223 | 63 | 1.59 |
| 2002/03 |  |  |  |  |  |  |  |  |  |  |
| June-Aug | 63 | 119 | 14 | 196 | 17 | 66 | 0 | 84 | 112 | 1.71 |
| Sep-Nov | 112 | --- | 41 | 152 | 17 | 31 | 1 | 48 | 104 | 1.82 |
| Dec-Feb | 104 | --- | 23 | 127 | 15 | 28 | 1 | 44 | 83 | 2.04 |
| Mar-May | 83 | --- | 18 | 101 | 23 | 28 | 0 | 51 | 50 | 2.01 |
| Mkt. yr. | 63 | 119 | 95 | 277 | 72 | 153 | 2.7 | 228 | 50 | 1.81 |
| 2003/04 |  |  |  |  |  |  |  |  |  |  |
| Mkt. yr. | 50 | 151 | 95 | 296 | 73 | 150 | 2.0 | 225 | 71 | 1.15-1.55 |

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

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

| Year beginning Sept. 1 | Corn | Sorg. | Barley | Oats | Feed grains | Wheat | Total grains | Animal units | Feed/ animal unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | --------------------------- Million metric tons ---------------------------------- |  |  |  |  |  |  | Mil. | Tons |
| 2001/02 0 ( ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |
| Sep-Nov | 56.0 | 4.2 | 0.2 | 0.6 | 61.0 | -0.6 | 60.4 |  |  |
| Dec-Feb | 39.2 | 0.7 | 0.4 | 0.4 | 40.6 | -0.2 | 40.4 |  |  |
| Mar-May | 29.5 | 0.7 | 0.0 | 0.3 | 30.4 | -0.7 | 29.7 |  |  |
| June-Aug | 24.1 | -0.2 | 1.2 | 1.0 | 26.1 | 5.3 | 31.4 |  |  |
| Mkt. yr. | 148.9 | 5.3 | 1.7 | 2.3 | 158.2 | 3.7 | 161.9 | 89.4 | 1.81 |
| 2002/03 |  |  |  |  |  |  |  |  |  |
| Sep-Nov | 51.9 | 3.4 | 0.2 | 0.6 | 56.1 | -2.0 | 54.0 |  |  |
| Dec-Feb | 39.7 | 0.2 | 0.1 | 0.5 | 40.5 | 0.3 | 40.7 |  |  |
| Mar-May | 29.2 | 0.8 | -0.1 | 0.5 | 30.3 | -0.3 | 30.0 |  |  |
| Mkt. yr. | 144.8 | 4.2 | 1.8 | 2.5 | 153.2 | 4.1 | 157.3 | 87.8 | 1.79 |
| 2003/04 |  |  |  |  |  |  |  |  |  |
| Mkt. yr. | 142.9 | 4.7 | 2.2 | 2.6 | 152.3 | 4.8 | 157.1 | 87.1 | 1.80 |

Source: USDA, Economic Research Service.

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 High Plains 1/ | Sorghum, <br> No. 2, Yel, <br> Gulf ports 1/ | Barley, <br> No. 2, feed, Duluth 2/ | Barley, <br> No. 3 or better, Malting, Minn. $2 /$ | Oats, <br> No. 2, <br> Heavy white, Minn. 2/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mkt. yr. | \$/bu | \$/bu | \$/cwt | \$/cwt | \$/bu | \$/bu | \$/bu |
| 1999/00 | 1.86 | 2.23 | 3.36 | 3.79 | NQ | NQ | 1.26 |
| 2000/01 | 1.91 | 2.29 | 3.87 | 4.35 | 1.47 | 2.37 | NQ |
| 2001/02 3/ | 1.92 | 2.28 | 3.90 | 4.23 | 1.52 | 2.44 | NQ |
| Monthly: |  |  |  |  |  |  |  |
| Mar. | 1.92 | 2.28 | 3.84 | 4.17 | 1.55 | 2.48 | NQ |
| Apr. | 1.89 | 2.21 | 3.73 | 4.03 | 1.55 | 2.47 | NQ |
| May | 1.96 | 2.29 | 3.88 | 4.10 | 1.55 | 2.45 | NQ |
| June | 2.04 | 2.37 | 3.99 | 4.20 | 1.55 | 2.48 | NQ |
| 2003: |  |  |  |  |  |  |  |
| Mar. | 2.31 | 2.67 | 4.39 | 4.78 | 2.00 | 3.81 | 2.05 |
| Apr. | 2.36 | 2.67 | 4.54 | 4.79 | 2.00 | 3.89 | NQ |
| May | 2.40 | 2.74 | 4.76 | 4.76 | 2.00 | 3.85 | NQ |
| June 3/ | 2.37 | 2.72 | NQ | NQ | NQ | 3.76 | NQ |

1/ Marketing year beginning September 1.
2/ Marketing year beginning June 1. 3/ Preliminary. $N Q=$ No quote.
Source: U.S. Department of Agriculture, Agricultural Marketing Service.

Table 4--Selected feed and feed byproduct prices

|  | Soybean meal high protein Decatur, IL 1/ | Cotton- seed meal, $41 \%$ slv. Memphis 1/ | $\begin{aligned} & \text { Corn } \\ & \text { gluten } \\ & \text { feed, } \\ & \text { IL } \\ & \text { pts. 1/ } \end{aligned}$ | Corn <br> gluten <br> meal, <br> IL <br> pts. 1/ | Meat \& bone meal, Central U.S. $1 /$ | Dists.' dried grains, Lawrence- burg, IN 1/ | Wheat <br> midlgs, <br> Kansas <br> City 1/ | Alfalfa <br> farm price 2/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$/ton |  |  |  |  |  |  |  |
| Mkt. yr. |  |  |  |  |  |  |  |  |
| 1999/00 | 165.92 | 124.00 | 52.89 | 237.31 | 163.13 | 82.93 | 53.13 | 80.20 |
| 2000/01 | 174.15 | 145.17 | 58.89 | 248.43 | 177.19 | 84.47 | 61.77 | 88.90 |
| 2001/02 3/ | 165.42 | 134.06 | 59.85 | 243.56 | 167.38 | 78.48 | 59.31 | 104.00 |
| Monthly: |  |  |  |  |  |  |  |  |
| 2001/02: |  |  |  |  |  |  |  |  |
| Mar. | 160.49 | 131.88 | 55.00 | 219.38 | 187.20 | 79.00 | 66.00 | 99.60 |
| Apr. | 161.57 | 124.30 | 53.60 | 217.00 | 174.89 | 70.80 | 52.27 | 103.00 |
| May | 164.28 | 120.88 | 53.63 | 217.38 | 156.51 | 73.50 | 41.02 | 108.00 |
| June | 158.00 | 137.50 | 55.00 | 230.00 | 159.50 | 75.00 | 49.80 | 102.00 |
| 2002/03: |  |  |  |  |  |  |  |  |
| Mar. | 175.40 | 142.40 | 66.25 | 230.70 | 180.50 | 85.00 | 64.80 | 96.20 |
| Apr. | 182.10 | 142.40 | 64.80 | 226.20 | 172.70 | 56.00 | 50.00 | 96.20 |
| May | 195.40 | 131.75 | 62.50 | 235.00 | 170.90 | 86.00 | 49.80 | 102.00 |
| June 3/ | 191.90 | 131.50 | 62.90 | 230.40 | 172.50 | 81.00 | 54.70 | 98.90 |

1/ Marketing year beginning September 1. 2/ Marketing year beginning May 1. 3/ Preliminary. NQ=No quote.
Sources: U.S. Department of Agriculture, Agricultural Marketing Service and National Agricultural Statistics Service.

Table 5--Corn: Food and industrial uses

| Year |  | Glucose and dex. | Starch | ---Alcohol--- |  | Cereals \& other products | Total food \& industrial |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HFCS |  |  | Fuel | Bev. \& Mfg. |  |  |
| Million bushels |  |  |  |  |  |  |  |
| 2001/02 |  |  |  |  |  |  |  |
| Sep-Nov | 127.2 | 56.0 | 62.4 | 165.5 | 32.0 | 46.2 | 489.3 |
| Dec-Feb | 119.9 | 49.7 | 57.9 | 173.1 | 33.6 | 46.2 | 480.4 |
| Mar-May | 143.3 | 54.6 | 61.3 | 184.6 | 35.1 | 46.8 | 525.6 |
| June-Aug | 150.3 | 56.8 | 64.1 | 190.6 | 30.3 | 46.8 | 538.8 |
| Mkt. year | 540.6 | 217.1 | 245.7 | 713.8 | 131.0 | 186.0 | 2,034.1 |
| 2002/03 |  |  |  |  |  |  |  |
| Sep-Nov | 126.6 | 54.5 | 63.5 | 210.9 | 32.0 | 46.5 | 534.0 |
| Dec-Feb | 121.1 | 49.9 | 63.0 | 234.1 | 33.6 | 46.5 | 548.1 |
| Mar-May | 139.7 | 56.0 | 64.1 | 249.4 | 35.1 | 47.0 | 591.3 |
| Mkt. year | 547.0 | 220.0 | 255.0 | 950.0 | 131.0 | 186.9 | 2,289.9 |
| 2003/04 |  |  |  |  |  |  |  |
| Mkt. year | 557.0 | 218.0 | 260.0 | 1,100.0 | 132.0 | 188.0 | 2,455.0 |

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

Table 6--Wholesale corn milling product and byproduct prices

|  | Corn meal, yellow, New York | Brewers' grits, Chicago | Sugar, dextrose, Midwest | HFCS, 42\% tank cars, Midwest | Corn starch, fob Midwest 3/ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$/cwt | \$/cwt | cents/lb | cents/lb | \$/cwt |
| Mkt. yr. 1/ |  |  |  |  |  |
| 1999/00 | 15.05 | 10.91 | 16.38 | 9.18 | 12.39 |
| 2000/01 | 15.85 | 11.75 | 16.83 | 9.25 | 12.44 |
| 2001/02 $2 /$ | 15.74 | 11.75 | 18.61 | 10.58 | 12.46 |
| Monthly |  |  |  |  |  |
| 2002: |  |  |  |  |  |
| Apr. | 15.28 | 11.18 | 18.88 | 10.80 | 12.55 |
| May | 15.72 | 11.63 | 18.88 | 10.80 | 12.52 |
| June | 15.67 | 12.15 | 18.88 | 10.80 | 12.67 |
| July | 16.31 | 13.02 | 18.88 | 10.80 | 12.79 |
| 2003: |  |  |  |  |  |
| Apr. | 16.82 | 12.70 | 20.88 | 11.50 | 13.06 |
| May | 16.94 | 12.83 | 20.88 | 11.50 | 13.24 |
| June | 16.73 | 12.62 | 20.88 | 11.50 | 13.24 |
| July 2/ | 16.32 | 12.21 | 20.88 | 11.50 | 13.15 |

1/ Marketing year beginning September 1. 2/ Preliminary. 3/ Bulk-industrial, unmodified.
Source: Milling and Baking News.

Table 7--U.S. feed grains imports by country of origin

| Country/region | -------2000/2001------ <br> Mkt. yr. | ------2001/2002------ <br> Mkt. yr. | $\begin{array}{r} \hline \text { 2002/2003 } \\ \text { Mkt. yr. } \end{array}$ |
| :---: | :---: | :---: | :---: |
| Oats: |  | Thousand tons |  |
| Canada | 1,466 | 1,138 | 843 |
| Finland | 103 | 264 | 360 |
| Sweden | 257 | 217 | 381 |
| Total 1/ | 1,827 | 1,654 | 1,640 |
| Barley, malting: |  |  |  |
| Canada | 585 | 488 | 317 |
| Total 1/ | 585 | 489 | 360 |
| Barley, other: $2 /$ |  |  |  |
| Canada | 51 | 32 | 42 |
| Total 1/ | 51 | 32 | 42 |

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.

Table 8--U.S. feed grain exports by selected destinations $1 /$

| Country/region | $-----2000 / 01------$ | $-----2001 / 02-------$ | 2002/2003 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Mkt. yr. | Sept.-May | Mkt. yr. | Sept.-May | Sept.-May |


|  | thousand metric tons |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CORN |  |  |  |  |  |
| Japan | 14,396 | 10,788 | 14,893 | 10,745 | 10,987 |
| Mexico | 5,906 | 4,825 | 4,464 | 3,669 | 4,470 |
| Taiwan | 4,831 | 3,555 | 4,680 | 3,445 | 3,197 |
| Egypt | 4,213 | 2,446 | 4,468 | 3,155 | 1,493 |
| S. Korea | 3,168 | 1,812 | 1,355 | 1,038 | 207 |
| Canada | 2,700 | 1,817 | 3,909 | 2,543 | 3,007 |
| Colombia | 1,615 | 1,101 | 1,698 | 1,222 | 1,207 |
| Venezuela | 1,264 | 710 | 460 | 144 | 390 |
| Algeria | 1,205 | 949 | 1,367 | 1,160 | 706 |
| Saudi Arabia | 1,053 | 702 | 714 | 507 | 130 |
| Dominican Republic | 976 | 716 | 1,030 | 751 | 731 |
| Israel | 694 | 560 | 832 | 570 | 133 |
| Syria | 588 | 326 | 786 | 495 | 317 |
| Turkey | 568 | 342 | 747 | 709 | 276 |
| Morocco | 530 | 286 | 600 | 425 | 27 |
| Costa Rica | 512 | 375 | 463 | 345 | 366 |
| Tunisia | 470 | 296 | 714 | 532 | 74 |
| Peru | 185 | 90 | 261 | 197 | 27 |
| Iran | 144 | 144 | 63 | 63 | -- |
| Sub-Saharan Africa | 113 | 111 | 695 | 452 | 328 |
| Former USSR | 112 | 10 | 86 | 86 | -- |
| Chile | 33 | 33 | 34 | 24 | -- |
| EU | 17 | 12 | 26 | 26 | 7 |
| East Europe | -- | -- | 15 | 15 | -- |
| China | -- | -- | 20 | 20 | -- |
| Others | 3,882 | 2,850 | 3,790 | 2,866 | 1,943 |
| Total | 49,175 | 34,857 | 48,172 | 35,203 | 30,024 |
| SORGHUM |  |  |  |  |  |
| Mexico | 4,924 | 3,952 | 4,653 | 3,800 | 2,388 |
| Japan | 811 | 737 | 1,264 | 951 | 905 |
| Israel | 110 | 102 | 30 | 30 | 14 |
| EU | -- | -- | 9 | 9 | -- |
| Others | 69 | 68 | 71 | 61 | 64 |
| Total | 5,915 | 4,860 | 6,027 | 4,850 | 3,371 |
|  | ------2000/2001----- |  | ------2001/2002------ |  | 2/2003 |
|  | Mkt. yr. |  | Mkt. yr. |  | Mkt. yr. |
| BARLEY |  |  |  |  |  |
| Saudi Arabia | 416 |  | -- |  | -- |
| Japan | 388 |  | 293 |  | 358 |
| Mexico | 113 |  | 70 |  | 25 |
| Taiwan | 57 |  | -- |  | -- |
| Canada | 32 |  | 94 |  | 195 |
| Other | 667 |  | 113 |  | 73 |
| Total | 1,258 |  | 571 |  | 650 |

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

