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## Feed Outlook

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## Record Corn Crop Forecast for 2003/04

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A major change this month from September was the 263-million-bushel increase in the corn crop to a record 10,207 million bushels. Record yields, at 142.2 bushels per acre, are behind this month-to-month change. The production increase more than offset an increase in corn utilization, and corn ending stocks were raised to 1,353 million bushels. Ending stocks were also raised for sorghum and barley. Corn and sorghum prices were lowered this month due to the increase in feed grain supply.

While global projected 2003/04 corn production was up this month because of a large increase in the United States, foreign production dropped over 5 million tons to 350 million, offsetting most of the U.S. increase. Corn production prospects declined significantly in China and the EU. However, foreign corn use forecasts were reduced by less than 1 million tons, as there is little evidence of changes in prospects for early season 2003/04 corn demand. Trade prospects were also little changed. This leaves 2003/04 projected foreign ending stocks of corn down 4.5 million tons to 43 million. Foreign ending corn stocks are now forecast more than 40 percent lower than beginning stocks, and are the lowest since 1977/78.

Figure 1
U.S. feed grain production, 1996-2003

Mil. bu.


## Feed Grain Production Raised to 277.6 Million Tons

U.S. feed grain production for 2003/04 is forecast at 277.6 million tons, up from 271.3 last month. The entire month-to-month increase came from corn. Forecast production for sorghum, barley, and oats declined. Beginning stocks were raised to 30.9 million tons and total 2003/04 feed grain supply is 311 million tons, up from 292.3 million in 2002/03.

Total 2003/04 feed grain utilization is projected at 272.5 million tons, up from 272 last month and 261.4 million tons a year earlier. All of the month-to-month increase came from corn. The year-to-year change stems from projected increases in feed and residual use, food seed and industrial, and exports, which are projected at $153.2,68.2$, and 51.1 million tons respectively. Total feed grains ending stocks were raised nearly 8 million tons to 38.5 million.

On a September-August marketing year basis, feed and residual use for the four feed grains plus feed wheat in 2003/04 is projected to total 157.8 million tons, down fractionally from a year earlier. Corn is estimated to account for 91 percent of feed and residual use in 2003/04. The projected index of grainconsuming animal units in 2003/04 is down fractionally to 87.7 million. Feed and residual per GCAU is estimated at 1.8 tons, unchanged from 2002/03.

Figure 2
Feed and residual use


Source: Economic Research Service and Foreign Agricultural Service, USDA.

2004 livestock production is summarized below:

- Beef production is forecast at 25.4 billion pounds, down from 26.6 billion in 2003,
- Pork production is forecast at 19.8 billion pounds, down 1 billion from 2003,
- Broiler production is forecast at 33.3 billion pounds, up from 32.6 billion in 2003,
- Egg production is forecast at 7.3 billion dozen, up 100 million from 2003,
- Milk production is forecast at 172.3 billion pounds, up from 170.3 in 2003.


## Minor Changes Made to 2002/03 Crop Year

The following changes were made to the 2002/03 balance sheets:

- Corn: feed and residual lowered from 5,700 million bushels to 5,635 million; food seed and industrial use lowered from 2,310 million bushels to 2,298 million because of reduced HFCS production; price raised from $\$ 2.30$ to $\$ 2.32$.
- Sorghum: feed and residual lowered 2 million bushels to 163 million; price raised from $\$ 2.30$ to \$2.32.
- Barley: feed and residual lowered 1 million bushels to 65 million.
- Oats: yield lowered fractionally to 56.7 bushels per acre; feed and residual lowered fractionally to 152 million bushels.

Figure 3
Corn supply
Mil. bu.


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

## 2003/04 Corn Crop Forecast at a Record

Corn production is forecast at a record 10.2 billion bushels, up 3 percent from last month and 13 percent above 2002/03. The forecast 2003/04 average yield of 142.2 bushels per acre is also a record. Corn yields are higher than many expected, and producers are finding that the hot, dry August conditions did not have as much of a negative yield impact as originally thought. Beginning stocks were raised to 1,086 million bushels, and total supply is projected at 11,303 million bushels up from 10,619 million a year earlier.

The October 1 corn objective yield data indicate the highest number of stalks on record for the combined seven objective yield States (Illinois, Indiana, Iowa, Minnesota, Nebraska, Ohio, and Wisconsin). The October objective yield forecasted ears per acre are also at a record high, 4 percent above the previous high set in 2000 and 6 percent above last year. As of September 28, 79 percent of the corn acreage was mature in the 18 major corn-producing States. This compares with 80 percent for last year and 84 percent for the average.

On the use side, feed and residual use was raised 75 million bushels to 5,700 million, and food seed and industrial use was lowered 25 million bushels to 2,450 million due to continued weakness in the HFCS market. Corn exports remain projected at 1,800

Figure 4
U.S. corn: Central Illinois cash and average
farm price, September 1996-September 2003
Dol/bu.


Source: Agricultural Marketing Service and National Agricultural Statistics Service, USDA.
million bushels in 2003/04, up from 1,600 million a year earlier. Total utilization is projected at 9,950 million bushels, up more than 4 percent from the previous marketing year.

The production increase more than offset the increased utilization, and ending stocks were raised 27 percent to 1,353 million bushels. The increased supplies lowered prices 20 cents on both high and low ends to $\$ 1.90-\$ 2.30$ per bushel compared with $\$ 2.32$ in 2002/03.

## Sorghum Crop Lowered to 401 Million Bushels

Sorghum production is 401 million bushels, down 2 percent from last month but up 8 percent from last year. Sorghum yield remain at 51 bushels per acre, up slightly from 2002/03. Sorghum planted area is estimated at 9.51 million acres, down 3 percent from August and 1 percent from 2002. Harvested area is forecast at 7.85 million acres, 8 percent above last year. With a 2 -million-bushel increase in beginning stocks, total supply for 2003/04 is projected at 443 million bushels, up from 431 million a year earlier.

Forecast feed and residual use was lowered 10 million bushels this month to 165 million, and food seed and industrial use was lowered 5 million bushels to 45 million. Exports remain projected at 190 million bushels for 2003/04. Projected total utilization is 400 million bushels, up from 388 million in 2002/03.

Figure 5
Sorghum supply


[^0]Ending stocks for 2003/04 were raised 7 million bushels this month to 43 million. Prices were lowered 15 cents on both high and low ends to $\$ 1.95-\$ 2.35$ per bushel compared with $\$ 2.30$ per bushel in 2002/03.

## 2003/04 Barley Crop Forecast at 276 Million Bushels

Barley production in 2003/04 is 276 million bushels, down 2 percent from last month but up 22 percent from a year earlier. Yield was raised 1.4 bushels per acre to 58.9 bushels, and harvested area is estimated at 4.69 million acres. The year-to-year production increase was due to both an increase in harvested area, especially in North Dakota, which increased by 740,000 acres, and generally favorable weather across the northern Great Plains and other western barley areas. Total supply for $2003 / 04$ is projected at 375 million bushels, up from 338 million bushels from the weather-damaged crop of a year earlier.

On the use side, forecast feed and residual was lowered 15 million bushels to 85 million. Less of the barley crop is being fed because more is going to malting and malting stocks to make up for the past two poor crops. Total utilization in 2003/04 was lowered 15 million bushels to 283 million, up from 269 million bushels a year earlier. Ending stocks for 2003/04 were raised nearly 10 million bushels to 92 million bushels compared with 66 million bushels a year earlier. Barley prices were raised 10 cents on

Figure 6
U.S. sorghum: Gulf ports cash and average farm price, September 1996 - September 2003
Dol/bu.


Source: Agricultural Marketing Service and National Agricultural Statistics Service, USDA.

Figure 7
Barley supply


Source: National Agricultural Statistics Service and Economic Research Service, USDA.
both high and low ends to $\$ 2.45-\$ 2.75$ per bushel compared with $\$ 2.72$ a year earlier. The main reason for the month-to-month price increase is the strong prices received by farmers and reported by NASS. Last year at this time, the simple average of prices was $\$ 2.68$ per bushel for malting barley and $\$ 1.96$ for feed barley compared with this year's $\$ 3.06$ for malting and $\$ 2.30$ for feed.

## 2003/04 Oats Crop Forecast at 145 Million Bushels

Figure 8
Barley prices received by farmers, June 1996-June 2003

Dol/bu.


Source: Agricultural Marketing Service, USDA.

Oats production was lowered 4 percent to 145 million bushels compared with last year's 119 million bushels. A 5-percent drop in harvested area to 2.2 million acres caused this month-to-month change. Yield was raised fractionally to 65 bushels per acre, up from 56.7 bushels per acre a year earlier. Record high yields are estimated in Illinois, Iowa, Kansas, Michigan, Missouri, Nebraska, and South Dakota. Total supply is forecast at 289 million bushels, up from 277 million bushels in 2002/03.

Projected feed and residual use was lowered 5 million bushels to 145 million, compared with 152 million bushels in 2002/03. Exports and food seed and industrial are unchanged and total utilization is projected at 220 million bushels. Ending stocks were lowered nearly 2 million bushels to 69 million. Prices are unchanged at $\$ 1.25-\$ 1.55$ per bushel compared with $\$ 1.81$ per bushel in 2002/03.

## Hay Production Decreases

All-hay production in 2003 is forecast at 160.7 million tons, up from 151 million tons in 2002. This increase stems from a nearly 7-percent rise in yield at 2.5 tons per acre. Total hay harvested area declined fractionally to 64.4 million acres from last month. Roughage-consuming animal units in 2003/04 are projected to be 71.1 million units, down from 72.2 million in 2002/03.

Figure 9
Oats supply


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

Alfalfa hay production, at 78.5 million tons, is up 6 percent from 2002. Yields are expected to average 3.34 tons per acre, up 0.15 ton from last year. Harvested area is forecast at 23.5 million acres, unchanged from the August estimate but up 2 percent from 2002.

Other hay production is forecast at 82.2 million tons, virtually the same as August but up 7 percent from 2002. Yields are forecast at a record 2.01 tons, the same as the August forecast but
0.15 ton above last year. Harvested area is estimated at 40.8 million acres, down 1 percent from 2002.

## Program Payments Increase for Corn, Sorghum, and Oats

As of October 8, 2003, corn farmers collected \$3.4 million in loan deficiency payments (LDPs) covering 45.1 million bushels or just under one-half of one percent of the 2003/04 corn crop. The average payment rate was 8 cents per bushel. For the entire 2002 crop, the payment rate was also 8 cents per bushel but only a small fraction of the crop received a payment.

For the 2003 sorghum crop, producers have collected $\$ 10.9$ million in LDPs covering 56 million bushels or about 14 percent of the crop. This compares with about 5 percent of the crop last year. The average payment rate was 19 cents per bushel compared with

Figure 10
U.S. oats: average farm price, June 1996-June 2003

Dol./bu.


Source: National Agricultural Statistics Service, USDA.

11 cents per bushel at the same time last year. For the entire 2002, crop about 6 percent received an LDP and the average payment rate was 11 cents.

For barley, producers have collected $\$ 265,000$ in LDPs covering about 1.7 percent of the crop compared with 10 percent of production at this time last year. The average payment rate for 2003 LDPs is 6 cents per bushel.

Figure 11
Hay production and RCAU


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

About 13 percent of the 2002 crop received an LDP with an average payment rate of 12 cents per bushel. Oats producers have received $\$ 2.1$ million in LDPs on 25.9 million bushels or 18 percent of the crop; the average payment rate is 8 cents per bushel. This time last year, oats producers had not collected any LDPs. For the entire 2002 crop year, oats producers received only $\$ 12,000$ in LDPs on a minuscule fraction of the crop.

Figure 12
Hay prices received by farmers, May 1996-May 2003


[^1]
## Foreign Corn Production Projection Down 5 Million Tons This Month

While global projected 2003/04 corn production was up this month because of a large increase in the United States, foreign production dropped over 5 million tons to 350 million, offsetting most of the U.S. increase. Corn production prospects declined significantly in China and the EU.

China's 2003/04 corn production forecast is down 4 million tons to 114 million. Recent crop tours indicate lower-than-earlier-expected yields across most of China. Early dryness hurt emergence in the Northeast, and an overcast cool summer limited growth in the North China Plain. This pegs China's 2003 corn production down more than 7 million tons from 2002.

EU corn production prospects dropped 1.5 million tons this month to 30.5 million, down 23 percent from a year earlier. Production prospects in France dropped 1 million tons this month as the effects of this summer's record heat, drought, and limited irrigation supplies became evident. With animal feed supplies tight, more corn area is being cut for silage and less harvested for grain.

Corn production prospects were also reduced by small amounts this month for Eastern Europe and South

Figure 13
World corn production


Africa, but these were more than offset by an increase of 0.4 million tons, to 1.4 million, in Venezuela's expected production.

Foreign barley production prospects for 2003/04 increased less than 1 million tons this month. While foreign oats and rye production prospects declined this month. The largest barley increase was a 0.5 -million-ton boost this month for Iraq, where improved weather and information boosted both production estimated for 2002 and forecast for 2003.

## Foreign Corn Use and Trade for 2003/04 Little Changed this Month, Foreign Stocks Drop

Projected foreign corn use in 2003/04 is down 0.6 million tons this month, an insignificant change, to 425 million tons. With reduced production in the EU, expected corn use is down this month 1 million tons to 36 million. However, this is partly offset by increased corn consumption expected in Venezuela and Iran.

Corn imports projected for 2003/04 are nearly unchanged this month. Small increases for Iran and Morocco were based on greater than expected imports in 2002/03, but increased production prospects reduced Venezuela's import prospects slightly. Despite reduced corn production prospects in the EU, forecast corn imports remain unchanged because the pace of purchases and imports has been slower than

Figure 14
World corn ending stocks


[^2]expected so far. The reduction in corn feed use in the EU this month is expected to be offset by increased feed use of barley and non-grain feed ingredients.

With small changes in use and imports, most of this month's drop in foreign production results in tighter expected ending stocks. This leaves 2003/04 projected foreign ending stocks of corn down 4.5 million tons to 43 million. Foreign ending corn stocks are now forecast more than 40 percent lower than beginning stocks, and are the lowest since 1977/78.

China holds by far the largest foreign corn stocks. With corn production projected down 4 million tons this month, forecast 2003/04 ending stocks have dropped by the same amount. Expected use is unchanged because meat production prospects are for continued expansion. Corn prices in China have increased in recent months, but not enough to choke off demand. Moreover, the corn export forecast also remains unchanged this month because China continues to sell corn for delivery in 2003/04.

China considers its level of grain stocks a secret, and does not publish them, so USDA estimates the whole historical series.

China's 2003/04 ending corn stocks are projected to drop to 21 million tons, less than half the level of estimated beginning stocks, and only a fraction of the 102 million tons estimated for 1999/2000. However, even though down dramatically from previous levels, China's corn stocks remain large and costly to maintain. Why should China with production and consumption much smaller than the United States, wish to maintain corn stocks nearly as large? As China's central government has declared a sharp cut in financing the holding of grain stocks, the incentive to maintain stocks is much reduced. Until the Government changes its policies of reducing stocks and encouraging exports, or until corn price increases in China accelerate, it is hard to foresee a change in prospects for 2003/04 corn use or trade.

With no change in China's corn exports or EU imports this month, only insignificant changes were made to corn export forecasts for 2003/04. U.S. corn exports are forecast to reach 46 million tons (October/September international marketing year), up 12 percent from estimated 2002/03 shipments.

## 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/2003/10-03/graintoc.htm)
World Agricultural Production (http://www.fas.usda.gov/wap/circular/2003/03-10/toc.html)
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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 | 2.43 |
| Dec-Feb | 232 | -- | 0 | 232 | 15 | 7 | 47 | 69 | 163 | 2.31 |
| Mar-May | 163 | --- | 0 | 163 | 10 | 31 | 40 | 81 | 82 | 2.22 |
| June-Aug | 82 | -- | 0 | 82 | 5 | -8 | 42 | 39 | 43 | 2.13 |
| Mkt. yr. | 61 | 370 | 0 | 431 | 45 | 163 | 180 | 388 | 43 | 2.32 |
| 2003/04 |  |  |  |  |  |  |  |  |  |  |
| Mkt. yr. | 43 | 401 | 0 | 443 | 45 | 165 | 190 | 400 | 43 | $1.95-2.35$ |

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. | Ex- <br> ports | Total disp. | End. 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 | 328 | 44 | 54 | 7 | 104 | 224 | 2.48 |
| 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 | 65 | 30 | 269 | 69 | 2.72 |
| 2003/04 |  |  |  |  |  |  |  |  |  |  |
| June-Aug | 69 | 276 | 6 | 351 | 44 | 63 | 5 | 112 | 239 | 3 |
| Mkt. yr. | 69 | 276 | 30 | 375 | 173 | 85 | 25 | 283 | 92 | -2.75 |

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 | 195 | 17 | 66 | 0 | 84 | 112 | 1.70 |
| Sep-Nov | 112 | --- | 41 | 152 | 17 | 31 | 1 | 48 | 104 | 1.82 |
| Dec-Feb | 104 | --- | 23 | 127 | 15 | 28 | 1 | 44 | 83 | 2.05 |
| Mar-May | 83 | --- | 18 | 101 | 23 | 28 | 0 | 51 | 50 | 2.01 |
| Mkt. yr. | 63 | 119 | 95 | 277 | 72 | 152 | 2.7 | 227 | 50 | 1.81 |
| 2003/04 |  |  |  |  |  |  |  |  |  |  |
| June-Aug | 50 | 145 | 15 | 209 | 17 | 60 | 1 | 78 | 132 | 1.47 |
| Mkt. yr. | 50 | 145 | 95 | 289 | 73 | 145 | 2.0 | 220 | 69 | $1.25-1.55$ |

[^3]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

|  | Corn | Sorg. | Barley | Oats | Feed grains | Wheat | Total grains | Animal units | Feed/ animal unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | --------------------------- Million metric tons ------------------------------- |  |  |  |  |  |  | Mil. | Tons |
| 2001/02 |  |  |  |  |  |  |  |  |  |
| 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 | 3.8 | 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 | 40.8 |  |  |
| Mar-May | 29.2 | 0.8 | -0.1 | 0.4 | 30.3 | -0.2 | 30.1 |  |  |
| June-Aug | 22.4 | -0.2 | 1.4 | 0.9 | 24.5 | 8.4 | 33.0 |  |  |
| Mkt. yr. | 143.1 | 4.1 | 1.6 | 2.4 | 151.3 | 6.6 | 157.9 | 87.8 | 1.80 |
| 2003/04 |  |  |  |  |  |  |  |  |  |
| Mkt. yr. | 144.8 | 4.2 | 2.0 | 2.4 | 153.3 | 4.5 | 157.8 | 87.7 | 1.80 |

Source: USDA, Economic Research Service.

Table 3--Cash feed grain prices

|  | Corn, No. 2, Yel, Ctrl. IL 1/ | Corn, <br> No. 2, Yel, <br> 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, <br> Duluth 2/ | Barley, <br> No. 3 or better, Malting, Minn. $2 /$ | Oats, <br> No. 2, <br> Heavy white, <br> Minn. $2 /$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mkt. yr. | \$/bu | \$/bu | \$/cwt | \$/cwt | \$/bu | \$/bu | \$/bu |
| 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 |
| 2002/03 3/ | 2.35 | 2.72 | NQ | NQ | 1.89 | 3.48 | NQ |
| Monthly: 2002: |  |  |  |  |  |  |  |
| 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 |
| July | 2.22 | 2.53 | 4.39 | 4.58 | 1.55 | 2.56 | 2.77 |
| Aug. | 2.50 | 2.79 | 4.79 | 5.20 | 1.74 | 2.69 | NQ |
| 2003: |  |  |  |  |  |  |  |
| May | 2.40 | 2.74 | 4.76 | 4.76 | 2.00 | 3.85 | NQ |
| June | 2.37 | 2.72 | NQ | NQ | 2.00 | 3.76 | NQ |
| July | 2.13 | 2.72 | NQ | NQ | 1.92 | 3.64 | 1.55 |
| Aug. 3/ | 2.26 | 2.44 | NQ | NQ | 1.78 | 2.87 | 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 <br> meal high protein Decatur, IL 1/ | Cotton- <br> seed <br> meal, <br> 41\% slv. <br> Memphis 1/ | Corn <br> gluten <br> feed, <br> IL <br> pts. 1/ | Corn <br> gluten <br> meal, <br> IL <br> pts. 1/ |  <br> bone <br> meal, <br> Central <br> U.S. 1/ | Dists.' dried grains, Lawrenceburg, IN 1/ | Wheat <br> midlgs, <br> Kansas <br> City 1/ | Alfalfa farm price 2/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$/ton |  |  |  |  |  |  |  |
| Mkt. yr. |  |  |  |  |  |  |  |  |
| 2000/01 | 174.15 | 145.17 | 58.89 | 248.43 | 177.19 | 84.47 | 61.77 | 88.90 |
| 2001/02 3/ | 165.53 | 134.06 | 59.71 | 242.86 | 167.55 | 78.48 | 59.31 | 104.00 |
| 2002/03 3/ | 178.87 | 147.23 | 65.27 | 241.65 | 170.81 | 74.94 | 64.02 | 100.00 |
| Monthly: |  |  |  |  |  |  |  |  |
| 2001/02: |  |  |  |  |  |  |  |  |
| 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 | 101.00 |
| July | 187.45 | 151.50 | 57.10 | 254.00 | 167.05 | 77.00 | 53.95 | 100.00 |
| Aug. | 186.25 | 159.75 | 61.75 | 275.00 | 168.84 | NQ | 61.25 | 101.00 |
| 2002/03: |  |  |  |  |  |  |  |  |
| May | 195.40 | 131.75 | 62.50 | 235.00 | 170.90 | 86.00 | 49.80 | 100.00 |
| June | 191.90 | 131.50 | 62.90 | 230.40 | 172.50 | 81.00 | 54.70 | 98.90 |
| July | 187.30 | 143.00 | 59.50 | 223.70 | 177.60 | 81.00 | 55.90 | 92.70 |
| Aug. 3/ | 189.70 | 151.70 | 61.60 | 226.90 | 194.10 | 0.00 | 63.00 | 91.00 |

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. <br> \& 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 |
| June-Aug | 144.4 | 59.0 | 65.0 | 258.7 | 30.3 | 47.0 | 604.4 |
| Mkt. year | 531.8 | 219.3 | 255.7 | 953.0 | 131.0 | 186.9 | 2,277.8 |
| 2003/04 |  |  |  |  |  |  |  |
| Mkt. year | 530.0 | 220.0 | 260.0 | 1,100.0 | 132.0 | 188.0 | 2,430.0 |

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\% <br> tank cars, Midwest | Corn starch, fob Midwest 3/ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$/cwt | \$/cwt | cents/lb | cents/lb | \$/cwt |
| Mkt. yr. 1/ |  |  |  |  |  |
| 2000/01 | 15.85 | 11.75 | 16.83 | 9.25 | 12.44 |
| 2001/02 | 15.74 | 11.75 | 18.61 | 10.58 | 12.46 |
| 2002/03 2 / | 16.45 | 12.86 | 20.36 | 11.65 | 13.21 |
| Monthly |  |  |  |  |  |
| 2002: |  |  |  |  |  |
| June | 15.67 | 12.15 | 18.88 | 10.80 | 12.67 |
| July | 16.31 | 13.02 | 18.88 | 10.80 | 12.79 |
| Aug. | 17.26 | 13.15 | 18.88 | 10.80 | 13.15 |
| Sept. | 17.30 | 14.10 | 19.13 | 12.30 | 13.69 |
| 2003: |  |  |  |  |  |
| June | 16.73 | 12.62 | 20.88 | 11.50 | 13.24 |
| July | 16.28 | 12.18 | 20.88 | 11.50 | 13.15 |
| Aug. | 16.68 | 12.57 | 20.90 | 11.50 | 12.67 |
| Sept. $2 /$ | 16.60 | 12.49 | 20.88 | 11.50 | 12.49 |

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 | ------2001/2002------ |  | ------2002/2003----- |  | 2003/2004 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mkt. yr. | June-Aug. | Mkt. yr. | June-Aug. | June-Aug. |
| Oats: | Thousand tons |  |  |  |  |
| Canada | 1,138 | 169 | 843 | 92 | 242 |
| Finland | 264 | 111 | 360 | 58 | 75 |
| Sweden | 217 | 25 | 381 | 83 | 49 |
| Total 1/ | 1,654 | 305 | 1,640 | 233 | 366 |
| Barley, malting: |  |  |  |  |  |
| Canada | 488 | 170 | 317 | 187 | 13 |
| Total 1/ | 489 | 170 | 360 | 187 | 64 |
| Barley, other: $2 /$ |  |  |  |  |  |
| Canada | 32 | 1.3 | 42 | 9 | 4 |
| Total 1/ | 32 | 1.4 | 42 | 9 | 4 |

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, U.S. Dept. of Commerce.

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

| Country/region | $-----2000$ <br> Mkt. yr. |  | $\begin{gathered} \hline----2001 / \\ \text { Mkt. yr. } \end{gathered}$ | ------- | $\begin{array}{r} \hline \text { 2002/2003 } \\ \text { Mkt. yr. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1,000 metric tons |  |  |  |  |  |
| Corn: |  |  |  |  |  |
| Japan | 14,396 |  | 14,893 |  | 14,508 |
| Mexico | 5,906 |  | 4,464 |  | 5,255 |
| Taiwan | 4,831 |  | 4,680 |  | 4,014 |
| Egypt | 4,213 |  | 4,468 |  | 2,702 |
| S. Korea | 3,168 |  | 1,355 |  | 270 |
| Canada | 2,700 |  | 3,909 |  | 3,923 |
| Colombia | 1,615 |  | 1,698 |  | 1,585 |
| Venezuela | 1,264 |  | 460 |  | 608 |
| Algeria | 1,205 |  | 1,367 |  | 898 |
| Saudi Arabia | 1,053 |  | 714 |  | 131 |
| Dominican Republic | 976 |  | 1,030 |  | 937 |
| Israel | 694 |  | 832 |  | 268 |
| Syria | 588 |  | 786 |  | 517 |
| Turkey | 568 |  | 747 |  | 981 |
| Morocco | 530 |  | 600 |  | 76 |
| Costa Rica | 512 |  | 463 |  | 529 |
| Tunisia | 470 |  | 714 |  | 123 |
| Peru | 185 |  | 261 |  | 42 |
| Iran | 144 |  | 63 |  | -- |
| Sub-Saharan Africa | 113 |  | 695 |  | 339 |
| Former USSR | 112 |  | 86 |  | -- |
| Chile | 33 |  | 34 |  | -- |
| EU | 17 |  | 26 |  | 8 |
| East Europe | -- |  | 15 |  | -- |
| China | -- |  | 20 |  | -- |
| Others | 3,882 |  | 3,790 |  | 2,599 |
| Total | 49,175 |  | 48,172 |  | 40,315 |
| Sorghum: |  |  |  |  |  |
| Mexico | 4,924 |  | 4,653 |  | 3,194 |
| Japan | 811 |  | 1,264 |  | 1,015 |
| Israel | 110 |  | 30 |  | 39 |
| EU | -- |  | 9 |  | 182 |
| Others | 69 |  | 71 |  | 104 |
| Total | 5,915 |  | 6,027 |  | 4,535 |
|  | ------2001/2002------ |  | ------2002/20 | 3------ | 2003/2004 |
|  | Mkt. yr. | June-Aug. | Mkt. yr. | June-Aug. | June-Aug. |
| Barley: |  |  |  |  |  |
| Saudi Arabia | -- | -- | -- | -- | -- |
| Japan | 293 | 137 | 358 | 68 | 41 |
| Mexico | 70 | 2 | 25 | 1 | 2 |
| Taiwan | -- | -- | -- | -- | -- |
| Canada | 94 | 36 | 195 | 51 | 19 |
| Other | 113 | 58 | 73 | 23 | 10 |
| Total | 571 | 232 | 650 | 143 | 72 |

[^4]Source: Bureau of the Census, U.S. Dept. of Commerce.


[^0]:    Source: National Agricultural Statistics Service and Economic Research Service, USDA.

[^1]:    Source: Agricultural Marketing Service, USDA.

[^2]:    Source: Foreign Agricultural Service, USDA.

[^3]:    Totals may not add due to rounding.
    1/ Corn and sorghum are on a September 1 to August 31 marketing year.

[^4]:    1/ Totals may not add due to rounding.

