



Grain Price OUTLOOK

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CORN: MARKET TO REFLECT U.S. AND CHINESE CROP PROSPECTS

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Summary

The USDA's June *Acreage* and *Grain Stocks* reports provided some modest fundamental support for the corn market. At 3.924 billion bushels, the USDA's estimate of June 1 corn stocks was 25 to 30 million less than generally expected and 56 million less than our projection. June 1 stocks were still 338 million larger than on the same date last year, and the largest for that date in 13 years.

The June estimate of planted acreage came in at 76.109 million acres, 584,000 less than reported in the March *Prospective Plantings* report, 3.436 million less than planted last year, and the smallest since 1995. Mid-season crop conditions are generally not as good as the ratings of a year ago. Prospects for a trend yield may still in place, but will require favorable July and August weather and a full growing season.

Lack of expansion in hog production and declining cattle numbers, along with a rebound in sorghum production, suggests that domestic feed use of corn will stabilize in the year ahead. Domestic processing use of corn should be supported by increased ethanol production, but the issue of oxygenated fuel requirements does not appear to be completely settled. Exports for the year ahead should be supported by a second consecutive small Chinese corn crop. However, larger southern hemisphere supplies and continued concerns about GMO crops suggest that growth will be small.

Stocks of corn in the U.S. should be reduced by the end of the 2001-02 marketing year, but it

appears that supplies will be large enough that corn use will not have to be restricted. At this early stage, prospects are for an increase in the average price of corn during the 2001-02 marketing year. Weather over the next two months will determine how much of an increase.

Current Supplies Are Abundant

The June 1 stocks estimate for corn provides a benchmark for calculating the rate of domestic feed and residual use of corn. Total use for the quarter is calculated and estimates of exports and domestic processing are subtracted to provide the estimate of feed and residual use of corn. The current calculation is tentative, with a firmer calculation available once Census Bureau export figures are available for May and the USDA provides an estimate of domestic processing use.

The June 1, 2001 stocks estimate of 3.924 billion bushels implies that about 2.122 billion bushels of corn were used in the third quarter of the 2000-01 marketing year (Table 1). That is 100 million bushels above the use for the same quarter last year and the second largest ever for that quarter (behind the 2.18 billion of 1995). Based on the USDA projection for the year, domestic processing use for the quarter is estimated at 523 million bushels, 11 million above use in the same quarter last year. The quarterly exports estimate is only four million more than for the same period last year. The quarterly export estimate is based on a combination of weekly export estimates provided by USDA and monthly Census Bureau report estimates available through April.

Feed and residual use for the quarter is calculated at 1.144 billion bushels, 85 million bushels (8 percent) larger than use of a year ago and the second largest use for the quarter. Feed and residual use through the first three quarters of the marketing year is estimated at 4.938 billion bushels, an increase of 164 million bushels (3.4 percent) from the total of last year. Use is running near the 3.3 percent increase projected by the USDA for the entire year. If use in the fourth quarter is up 3.3 percent, the total for the year will be 5.857 billion bushels. Given the moderation in animal numbers, the increase for the summer quarter may be a little smaller. We project use for the year at 5.85 billion bushels.

Based on USDA weekly export inspection figures, corn exports during June and the first half of July were about 10 million bushels larger than shipments during the same period last year. Shipments to Japan and South Korea have recovered somewhat from the very slow start this year. The slow start reflected larger than expected Chinese corn exports and concerns about GMO corn. Shipments to Japan are not likely to fully recover given Japanese interest in South American and European corn. Both Argentina and Brazil have large crops. Given that the Census Bureau estimate of corn exports through April was about 30 million larger than the estimate based on USDA reports, it appears that weekly shipments will need to average 35 million per week in the last half of July and August to reach the 1.825 billion currently projected by the USDA. That is about four million per week less than shipments during the same period last year. As of July 5, the USDA reported that 291 million bushels of U.S. corn had been sold for export this year, but not yet shipped. That was about 23 million more than outstanding sales on the same date last year. It appears that exports for the year will be slightly larger than the current USDA projection. We are using a projection of 1.85 billion. The disappointment is that exports will be nearly 100 million less than shipped last year and 425 million less than projected in November 2000.

If domestic processing uses of corn reaches the 1.965 billion bushel level projected by the USDA, corn used for all purposes during the 2000-01 marketing year will total a record 9.665 billion bushels. Year ending (September 1, 2001) stocks, however, will likely exceed 2 billion bushels for the first time in eight years (Table 2).

Our projection of stocks of 2.028 billion bushels represent 21 percent of projected consumption for the year, also the largest stocks-to-use ratio in eight years. In contrast, the stocks of corn and of all coarse grains outside of the United States are projected to decline by the end of the current marketing year. Some of that decline is occurring in Eastern Europe, but is mostly occurring in China.

2001 Crop Prospects

Planted acreage of corn in the U.S. is now estimated at 76.109 million acres, 584,000 less than reported in the USDA's March *Prospective Plantings* report, 3.436 million less than planted in 2000, and the smallest planted acreage since 1995 (Table 3). Compared to March intentions, the June *Acreage* report showed large acreage declines in South Dakota (300,000), Texas (300,000), Illinois (100,000), Nebraska (100,000), Kansas (100,000), and Missouri (150,000). Acreage exceeded intentions in Indiana (400,000), Minnesota (100,000), Michigan (50,000), and Ohio (50,000). Compared to 2000, the largest acreage declines came in South Dakota (500,000), Texas (500,000), Iowa (400,000), Illinois (300,000), Nebraska (300,000), and Minnesota (200,000) [Table 4].

Planted acreage of sorghum, the second largest grain crop in the U.S., is estimated at 9.747 million acres, 379,000 more than indicated in March and 552,000 more than planted last year. Importantly, harvested acreage of sorghum is projected to be 1.134 million acres larger than last year's weather reduced harvested acreage. However, hot, dry conditions in early July posed some threat to the sorghum crop.

The final estimate of planted acreage of corn typically differs from the June estimate. The difference, however, has been relatively small in each of the last three years, ranging from 34,000 acres in 2000 to 633,000 in 1998. In every year of "freedom to farm" (1996-2000), the final estimate of corn acreage has been below the June estimate (Table 3). Based on planting progress this year, we do not expect the final acreage figure to differ significantly from the June estimate.

More uncertainty centers around the amount of acreage to be harvested for grain. Over the past five years, the difference between acreage planted

for all purposes and acreage harvested for grain has ranged from 6.585 million (1996) to 7.5767 million (1998). The "typical" difference has been about 6.86 million. For the current crop year, the USDA projects harvested acreage of corn at 69.291 million, 6.818 million less than acreage planted for all purposes.

Planted acreage of all non-hay crops in 2001 is estimated to be 5.265 million less than planted in 2000. Only an estimate of harvested acreage of hay is provided. That estimate is 3.917 million larger than harvested acreage in 2000. That increase, however, is not likely new acreage, but reflects the drought-reduced harvested acreage of last year. Harvested acreage of hay was down 3.366 million last year. The largest declines in planted acreage of non-hay crops has occurred in Texas, Oklahoma, North Dakota, South Dakota, Minnesota, and Montana. Some of that acreage decline probably reflects prevented plantings due to excess moisture, but most of the decline was reflected in the March *Prospective Plantings* report.

While the uncertainty about planted and harvested acreage of corn has not been completely settled, the market will now focus on yield prospects for the 2001 crop. Of most interest will be the USDA's weekly crop condition reports. The report of July 16, showed 65 percent of the crop rated in good or excellent condition, compared to 75 percent in those two categories on the same date last year. The highest crop ratings were in Colorado, Tennessee, North Carolina, North Dakota, Indiana, and Kentucky. The lowest ratings were in Texas, Minnesota, Kansas, Michigan, Iowa, and Wisconsin. Crop condition ratings at this stage of the growing season are not highly correlated with yield, but current conditions in conjunction with some hot, dry weather in mid to late July, suggest trend yields are in jeopardy. With pollination spread over a fairly long period this year, it is unlikely that widespread severe problems will occur. On the other hand, a wider pollination window opens the door for some regional problems. Hot, dry conditions in early July likely hampered the pollination process in some areas. Lagging rainfall totals are also of some concern over much of the midwest.

The U.S. average corn yield has been near trend value in each of the past six years (Table 5). The 138.6 bushel average of 1994 still stands as the

record. The 2000 crop had the potential for a new record average, with both the August and September forecasts near 142 bushels per acre. Dryness in the western corn belt, as well as parts of the southwest and southeast, and extensive lodging in other areas prevented the record from materializing. There is some chance that the current 137.1 bushel yield estimate for the 2000 crop may be lowered. That evidence is primarily the smaller-than-expected June 1, 2001 inventory of corn.

Where does all of this leave us for 2001? July weather has put significant stress on crops in some areas. We are inclined to use a yield forecast below the trend of 137 bushels per acre. An estimate of 135 bushels is used here, but with a lot of uncertainty. There is also some chance that harvested acreage could fall a bit short of the USDA's projection of 69.291 million. A reasonable expectation for crop size based on current conditions seems to be near 9.315 billion bushels (Table 2). A crop of that size would result in a 2001-02 marketing year supply of 11.353 billion bushels, about 340 million bushels smaller than the supply of a year ago.

The expected decline in cattle numbers, the lack of expansion in hog production, and the likely rebound in sorghum production all suggest that domestic feed and residual use of corn will stabilize, or more likely, decline slightly during the year ahead. Hog numbers may expand modestly in the last half of the 2001-02 marketing year. A decline of 100 million bushels, to a total of 5.75 billion is projected here. Domestic processing uses of corn are expected to continue to expand, led by ethanol production. The rate of growth is difficult to project, however. Products other than corn will capture some of the growth in the ethanol market and the level of petroleum prices will have some impact on overall demand for ethanol. The recent sharp decline in gasoline prices may make ethanol slightly less economical. Longer run, the outlook for ethanol use is tied very closely to the requirements for use of oxygenated fuels in some markets. Improved petroleum refining techniques may make such a requirement obsolete in the near future. For the year ahead, use for all food, seed, and industrial purposes is projected at 2.05 billion bushels, 4.3 percent more than projected for the current year.

U.S. corn exports during the 2001-02 marketing year will depend on a number of factors, including the price of corn, the relative value of the U.S. dollar, and general economic conditions in importing countries. However, the size of the 2001 Chinese corn crop and the magnitude of Chinese corn exports and/or imports during the upcoming year may be one of the most important factors influencing U.S. corn exports. A second consecutive small crop due to dry weather is forecast. The USDA forecasts Chinese production at 4.527 billion bushels, up marginally from the 4.173 billion bushel crop of last year, but well below the 5.043 billion bushels of 1999 and the record 5.234 billion of 1998. Currently, the USDA projects that Chinese exports will decline by nearly 200 million bushels during the 2001-02 marketing year. In a surprise development, China bought some new crop U.S. corn in early July.

The size of the 2002 corn crop in South America will also be important for U.S. corn exports. The large Brazilian crop of 2001 has resulted in exports from that country for the first time in nearly 20 years. The 2001 corn harvest in Brazil is estimated at 1.555 billion bushels, nearly 25 percent larger than the 2000 harvest. Acreage expanded about 12 percent and average yields were also nearly 12 percent higher than in 2000. Much of the increase was in southern Brazil (up 41 percent). Acreage in the south and southeast appears to be expanding as soybean production continues to push north and west. The current low prices of corn in Brazil, however, may slow the growth in corn acreage. Still, another large crop is possible with favorable growing conditions.

The USDA also projects larger coarse grain crops in Eastern Europe, Canada, and South Africa (Table 6). Coarse grain production outside of the U.S. is expected to grow by about 5.3 percent from the low level of the current marketing year.

For now, we project that U.S. corn exports will grow by about 200 million bushels in the year ahead, to a total of 2.050 billion. Sales of the new crop, however, are off to a slow start. As of July 5, only 15 million bushels of corn had been sold for shipment next year compared to 48 million on the same date last year. The decline reflects the lack of sales to Japan and Mexico. Corn used for all purposes is expected to grow to a record 9.825 billion bushels, leaving an inventory of 1.5 billion bushels on September 1, 2002.

Price Prospects

The price of corn has been at an extremely low level for 36 consecutive months. The average cash price in central Illinois from July 1998 through June 2001 was \$1.905 per bushel. On a daily basis (overnight bid) the cash price ranged from a low of \$1.45 (August 1, 2000) to a high of \$2.315 (July 8, 1998). For the current year, the daily price has ranged from \$1.51 (September 19, 2000) to \$2.105 December 29, 2000 and averaged \$1.86 per bushel through June. As of July 16, the price stood at \$1.90.

With a smaller crop, increased use, and a decline in stocks during the year ahead, a slightly higher average price is expected. With carryover stocks near 1.5 billion bushels, a season's average price near \$2.10 per bushel is expected (Table 2). The futures market as of July 16 was reflecting an average price of about \$2.15 for corn delivered during the 2001-02 marketing year. Assuming basis levels near those of this year, the market was offering a premium of more than \$.35 per bushel for corn delivered in the summer of 2002 compared to corn delivered at harvest time.

With so much of the growing season left, the uncertainty about U.S. and Chinese crop size may keep prices somewhat volatile for the next three months. After trading to a contract low near \$2.02 on June 25, for example, December 2001 futures moved to about \$2.47 on July 12 and 13, before settling back to near \$2.30. The high for that contract is \$2.75, reached in May 2000. Concerns about adverse weather over the next two months may be enough to push December 2001 futures to the \$2.50 or perhaps the \$2.60 level. Persistent dryness in major growing areas could generate additional price strength. Speculative buying could produce a summer price bubble.

As harvest time bids move above the loan level, pricing decisions have to be made. For those who have a small percentage of the new crop priced, a move to the \$2.45 to \$2.50 level in December futures would offer an opportunity to make some sales. Depending on the cost of storage, sales for post-harvest delivery might be considered due to the large carry in the market. Producers can plan to use the majority of available storage for corn if desired, since there is very little carry in the soybean price structure. If large new crop sales are made, some use of options might be

considered. At this writing, at-the-money December options were priced at about \$.15 per bushel. Again, depending on the cost of storage, corn prices may increase enough that a minimum price above the loan rate can be established for post-harvest deliveries.

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Table 1. Corn Quarterly Balance Sheet

	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
	million bushels																			
September 1 stocks	1,392	2,537	3,523	1,006	1,648	4,040	4,882	4,259	1,930	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718
Production	8,119	8,235	4,174	7,672	8,875	8,226	7,131	4,929	7,532	7,934	7,475	9,477	6,338	10,051	7,400	9,233	9,207	9,759	9,431	9,968
TOTAL ^a	9,511	10,772	7,699	8,680	10,534	12,267	12,016	9,191	9,464	9,282	9,016	10,584	8,472	10,910	8,974	9,672	10,099	11,085	11,232	11,693
September-November																				
Seed, food, ind.	173	208	227	244	276	295	296	302	312	338	361	370	383	410	417	388	435	450	459	465
Export	519	443	493	503	415	318	396	471	582	383	421	488	435	449	660	487	380	450	534	506
Feed, residual	1,218	1,215	1,326	1,301	1,219	1,348	1,551	1,344	1,487	1,619	1,673	1,814	1,701	1,963	1,778	1,885	2,030	2,118	2,189	2,194
TOTAL	1,910	1,866	2,046	2,048	1,910	1,961	2,243	2,117	2,381	2,339	2,455	2,672	2,519	2,822	2,856	2,759	2,845	3,018	3,182	3,165
December 1 stocks	7,601	8,906	5,652	6,631	8,615	10,305	9,771	7,072	7,082	6,940	6,547	7,906	5,937	8,080	6,106	6,903	7,247	8,052	8,039	8,522
Seed, food, ind.	166	192	212	236	262	281	288	301	313	330	362	365	379	410	405	400	425	434	447	464
Export	470	510	506	580	460	313	405	502	682	471	362	463	330	590	562	525	380	465	468	416
Feed, residual	1,199	1,305	1,069	1,192	1,306	1,463	1,444	1,065	1,276	1,351	1,267	1,401	1,240	1,492	1,344	1,486	1,503	1,460	1,526	1,600
TOTAL	1,835	2,007	1,787	2,008	2,028	2,057	2,137	1,868	2,271	2,152	1,991	2,229	1,949	2,493	2,311	2,411	2,308	2,359	2,441	2,480
March 1 stocks	5,766	6,899	3,865	4,623	6,587	8,248	7,636	5,204	4,812	4,789	4,561	5,678	3,996	5,592	3,800	4,494	4,940	5,698	5,602	6,043
Seed, food, ind.	201	228	253	294	307	333	337	353	376	384	414	414	423	452	433	471	470	495	512	523
Export	596	475	513	475	201	496	510	592	601	454	371	411	270	568	610	433	350	497	451	455
Feed, residual	1,089	1,272	954	1,019	1,091	1,088	951	841	993	960	1,042	1,146	950	1,159	1,044	1,097	1,084	1,097	1,059	1,144
TOTAL	1,886	1,975	1,720	1,788	1,599	1,917	1,798	1,786	1,970	1,798	1,828	1,971	1,642	2,180	2,087	2,001	1,904	2,089	2,022	2,122
June 1 stocks	3,880	4,924	2,145	2,836	4,990	6,332	5,839	3,419	2,843	2,992	2,739	3,709	2,360	3,415	1,718	2,497	3,040	3,616	3,586	3,924
Seed, food, ind.	193	227	238	293	307	324	331	341	369	374	396	407	429	442	373	460	475	467	495	495
Export	412	393	374	292	151	365	406	463	503	419	430	301	293	570	396	353	394	569	484	484
Feed, residual	739	781	527	603	499	761	843	685	627	679	816	891	789	846	527	809	865	795	890	890
TOTAL	1,344	1,401	1,139	1,188	957	1,450	1,580	1,489	1,499	1,472	1,642	1,599	1,511	1,858	1,295	1,617	1,734	1,831	1,869	1,869
September 1 stocks	2,537	3,523	1,006	1,648	4,040	4,882	4,259	1,930	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,718
Annual																				
Seed, food, ind.	733	855	930	1,067	1,152	1,233	1,251	1,298	1,370	1,425	1,533	1,556	1,613	1,715	1,628	1,714	1,805	1,846	1,913	1,913
Export	1,997	1,821	1,887	1,850	1,227	1,492	1,716	2,029	2,367	1,727	1,584	1,663	1,328	2,177	2,228	1,797	1,504	1,981	1,937	1,937
Feed, residual	4,245	4,573	3,876	4,115	4,114	4,660	4,789	3,934	4,382	4,609	4,798	5,252	4,680	5,460	4,693	5,277	5,482	5,471	5,664	5,664
TOTAL	6,975	7,249	6,693	7,032	6,494	7,385	7,757	7,260	8,120	7,761	7,916	8,471	7,622	9,352	8,548	8,789	8,791	9,298	9,524	9,524

^a Includes imports for the entire year.

Table 2. Corn Annual Balance Sheet

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01 ^a	2001-02 ^a
	million bushels												
Carryin	1,930	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	2,028
Production	<u>7,532</u>	<u>7,934</u>	<u>7,475</u>	<u>9,477</u>	<u>6,338</u>	<u>10,051</u>	<u>7,400</u>	<u>9,233</u>	<u>9,207</u>	<u>9,759</u>	<u>9,431</u>	<u>9,968</u>	<u>9,315</u>
TOTAL ^b	9,464	9,282	9,016	10,584	8,472	10,910	8,974	9,672	10,099	11,085	11,232	11,693	11,353
Seed, food, industrial	1,370	1,425	1,533	1,556	1,613	1,715	1,628	1,714	1,805	1,846	1,913	1,965	2,050
Export	2,367	1,727	1,584	1,663	1,328	2,177	2,228	1,797	1,504	1,981	1,937	1,850	2,050
Feed and residual	<u>4,382</u>	<u>4,609</u>	<u>4,798</u>	<u>5,252</u>	<u>4,680</u>	<u>5,460</u>	<u>4,693</u>	<u>5,277</u>	<u>5,482</u>	<u>5,471</u>	<u>5,664</u>	<u>5,850</u>	<u>5,750</u>
TOTAL	8,120	7,761	7,915	8,471	7,621	9,352	8,548	8,789	8,791	9,298	9,515	9,665	9,850
Carryout	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	2,028	1,503
U.S. average price	\$2.36	\$2.28	\$2.37	\$2.07	\$2.50	\$2.26	\$3.24	\$2.71	\$2.45	\$1.94	\$1.82	\$1.85	\$2.10

^a Projected

^b Includes imports

Table 3. United States Corn Planting Intentions, Actual Plantings, and Acres Harvested

Year	Planted Acreage			Actual	Harvested Acreage
	February/January Intentions	March Intentions	June Intentions		
			thousand acres		
1976	80,822	82,727	84,092	84,588	71,506
1977	84,526	83,923	82,735	84,328	71,614
1978	80,944	80,237	78,717	81,675	71,930
1979	80,676	79,209	79,751	81,394	72,400
1980	83,131	82,022	83,478	84,043	72,961
1981	...	83,977	84,677	84,097	74,524
1982	...	84,735	82,129	81,857	72,719
1983	69,569 ^a	58,812	60,129	60,217	51,479
1984	...	81,766	79,940	80,617	71,897
1985	...	82,021	83,217	83,398	75,209
1986	...	78,066	76,646	76,580	68,907
1987	...	67,556	66,024	66,200	59,505
1988	...	66,926	67,519	67,717	58,250
1989	...	73,253	72,790	72,322	64,783
1990	...	74,804	74,574	74,166	66,952
1991	77,500	76,124	75,909	75,957	68,822
1992		79,007	79,335	79,311	72,077
1993		76,486	74,259	73,239	62,933
1994		78,625	78,767	78,921	72,514
1995		75,323	72,800	71,479	65,210
1996		79,920	80,355	79,229	72,644
1997		81,416	80,227	79,537	72,671
1998		80,781	80,798	80,165	72,589
1999		78,219	77,611	77,386	70,487
2000		77,881	79,579	79,545	72,732
2001		76,693	76,109		(69,291)

^a February

Table 4. Planted Acreage of Corn by State

State	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 ¹
	thousand acres											
Georgia	660	600	750	650	600	400	580	550	500	350	400	280
Illinois	10,600	11,200	11,200	10,590	11,600	10,200	11,000	11,200	10,600	10,800	11,200	10,900
Indiana	5,600	5,700	6,100	5,550	6,100	5,400	5,600	5,900	5,800	5,800	5,700	5,900
Iowa	12,800	12,500	13,200	12,000	13,000	11,700	12,700	12,200	12,500	12,100	12,300	11,900
Kansas	1,600	1,800	1,850	2,000	2,280	2,150	2,500	2,750	3,000	3,150	3,450	3,300
Kentucky	1,350	1,400	1,420	1,370	1,350	1,280	1,300	1,270	1,300	1,320	1,330	1,280
Michigan	2,400	2,600	2,700	2,500	2,550	2,450	2,650	2,500	2,300	2,200	2,200	2,200
Minnesota	6,700	6,600	7,200	6,300	7,000	6,700	7,500	7,000	7,300	7,100	7,100	6,900
Missouri	2,100	2,300	2,500	2,200	2,400	1,650	2,750	2,700	2,650	2,650	2,850	2,700
Nebraska	7,700	8,200	8,300	8,000	8,600	8,000	8,500	8,900	8,800	8,600	8,500	8,200
North Carolina	1,200	1,050	1,150	1,000	1,000	800	1,000	960	860	750	730	710
Ohio	3,700	3,700	3,800	3,500	3,700	3,300	2,900	3,800	3,550	3,450	3,550	3,400
Pennsylvania	1,380	1,400	1,380	1,370	1,400	1,380	1,450	1,550	1,550	1,500	1,550	1,500
South Dakota	3,400	3,750	3,800	3,350	3,800	2,800	4,000	3,800	3,900	3,600	4,300	3,800
Tennessee	620	620	740	660	670	640	770	700	700	630	650	630
Texas	1,650	1,700	1,750	2,000	2,150	2,100	2,100	2,000	2,400	1,950	2,100	1,600
Wisconsin	3,700	3,800	3,900	3,400	3,750	3,650	3,900	3,850	3,700	3,600	3,500	3,400
United States	74,171	75,951	79,325	73,323	79,158	71,245	79,487	79,537	80,165	77,386	79,545	76,109

¹ June intentions

Table 5. United States Corn Yield Estimates

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	bushels per acre																									
July 1	93.0	90.5	89.4	90.1	95.8	99.3	95.9	87.0												
August 1	87.4	86.7	87.3	96.1	102.1	93.0	104.3	113.9	99.9	107.9	110.6	120.4	121.4	78.5	112.8	117.7	107.8	121.3	116.0	128.4	125.6	118.7	125.3	130.0	134.7	141.9
September 1	85.1	82.8	89.7	100.3	104.6	91.8	107.1	113.9	85.1	106.3	113.3	119.7	119.9	78.5	112.4	121.7	106.1	121.4	113.1	129.0	121.1	120.2	125.2	132.0	132.2	141.8
October 1	86.2	82.7	90.8	100.7	106.4	90.8	109.0	114.2	82.9	105.5	115.1	119.2	119.9	80.2	114.4	120.3	108.8	123.8	110.3	133.8	116.6	123.0	125.8	132.0	133.5	139.6
November 1	87.2	85.5	91.5	101.2	109.2	90.8	109.2	114.2	80.5	105.9	116.6	119.3	120.3	82.3	116.6	119.0	108.6	129.3	103.1	138.4	113.7	126.5	126.4	133.3	134.5	137.7
January 1	86.2	87.4	90.8	101.2	109.4	91.0	109.9	114.8	81.6	106.6	118.0	119.3	119.4	84.6	116.2	118.5	108.6	131.4	100.7	138.6	113.5	127.1	127.0	134.4	133.8	137.1
FINAL	86.4	88.0	90.8	101.0	109.5	91.0	108.9	113.2	81.1	106.7	118.0	119.3	119.8	84.6	116.3	118.5	108.6	131.5	100.7	138.6	113.5	127.1	126.7	134.4	133.8	

Table 6. World Coarse Grain Production

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	million metric tons																		
United States	137.1	237.7	274.9	252.8	215.9	149.7	221.4	230.7	218.6	277.4	186.5	284.9	210.0	265.7	260.4	271.5	263.2	274.5	264.7
Former USSR	99.0	90.5	100.0	105.9	113.7	97.5	104.8	99.4	80.4	95.3	95.6	79.2	57.4	52.0	67.9	38.0	41.0	49.5	49.3
Western Europe	86.2	103.6	101.4	94.0	93.3	99.5	102.2	97.6	104.3	93.8	96.1	86.6	88.5	103.8	109.4	105.6	103.0	107.8	107.0
China	92.7	96.2	82.3	87.0	95.8	94.2	93.5	111.7	112.3	108.4	117.8	114.3	124.5	141.3	114.7	144.2	137.8	114.9	124.5
Eastern Europe	67.1	72.8	65.5	73.9	63.9	61.3	60.2	51.4	64.7	43.2	44.5	46.9	51.4	50.0	59.0	51.0	54.6	36.4	48.2
Canada	21.0	22.0	23.9	25.5	25.5	19.7	23.5	24.8	21.8	19.6	24.0	23.4	24.1	28.2	25.1	26.6	26.8	24.4	26.9
India	34.1	31.4	25.8	26.6	23.5	31.3	34.6	32.6	25.9	36.8	31.0	30.1	29.8	34.3	30.9	31.7	30.5	30.5	32.0
Brazil	21.5	22.5	21.7	27.3	25.4	26.7	22.5	24.4	31.4	29.9	33.8	38.2	33.2	36.6	31.3	33.5	32.6	41.1	39.1
Argentina	17.4	18.9	17.4	13.0	13.1	7.3	8.3	10.8	14.5	14.1	13.3	13.9	14.1	18.9	24.7	17.8	21.5	20.0	20.4
South Africa	5.1	9.0	8.9	7.9	7.9	13.0	9.5	8.9	3.6	10.7	14.0	5.4	11.0	10.7	8.2	8.1	11.1	7.9	9.5
World	685.4	814.1	843.3	835.2	791.5	731.2	802.6	819.5	804.2	869.1	799.9	873.6	802.9	908.3	883.2	890.1	877.4	856.5	877.7
Excluding the U.S.	548.3	576.4	568.4	582.4	575.7	581.5	581.2	588.8	585.6	591.7	613.4	588.7	592.9	642.6	622.8	618.4	614.3	582.1	613.1

Source: USDA, FAS, World Crop Production, July 2001 and earlier issues.