



Grain Price OUTLOOK

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CORN: CONSUMPTION TO EXPAND RAPIDLY

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Summary

The USDA's June 1 *Grain Stocks* report confirmed a high rate of domestic consumption of the 2005 corn crop. Along with expanded exports, large domestic use means that total use this year will likely exceed production. That trend is expected to continue in the year ahead as reduced acreage points to a smaller crop and consumption is expected to increase by 550 million bushels, or 5 percent. Much of the expected increase is in corn used for ethanol production. A trend yield and a reduction in year ending stocks to about 1.07 billion bushels, point to a 2006-07 marketing year average farm price of about \$2.50 per bushel, \$.50 above the average expected for the current year and the highest in 10 years.

The biggest uncertainty for the next two months centers around the size of the 2006 U.S. corn crop. Weather and growing conditions have been less than ideal, with declining crop condition ratings during July. Each one bushel difference between actual yield and trend yield (149 bushels) would alter the average farm price forecast by \$.06 to \$.08 per bushel. Beyond harvest, the Chinese import/export situation for corn may be the most important demand factor.

Old Crop Consumption

Consumption of U.S. corn during the 2005-06 marketing year is proceeding at a record pace (Table 1). Exports during the March-May 2006 quarter, at 565 million bushels, were the largest in 10 years. Exports continued large in June and the first half of July. Census Bureau export estimates are available only through May, but based on USDA estimates, cumulative exports through July

13 were likely about 215 million bushels larger than on the same date last year. Export inspections through July 13 were 240 million bushels larger than last year's cumulative inspections. However, last year inspections through May trailed Census Bureau estimates by 76.5 million bushels. This year, that deficit was only 45.3 million bushels. For the year, the USDA projects U.S. corn exports at 2.1 billion bushels, 286 million more than shipped last year. Shipments during the last 7 weeks of the year will need to average about 44.5 million bushels per week to reach the USDA projection. That is about 10 million per week more than the pace during the same period last year. Unshipped sales as of July 13 were 90 million larger than unshipped sales of a year ago. About 2.5 million bushels had been sold to China with another 46 million bushels sold to "unknown" destinations. It appears that shipments will reach, or even exceed, the USDA projection. We are using a projection of 2.11 billion bushels.

Feed and residual use of corn was extremely large during the first half of the 2005-06 marketing year. At 3.883 billion bushels, use exceeded the record of a year ago by 90 million bushels. Use during the third quarter totaled 1.281 billion bushels, 31 million less than use during the same quarter last year. Use during the last half of the 2005-06 marketing year was surprisingly large, perhaps suggesting that the 2004 crop was overestimated or that an unusually larger quantity of corn was lost due to storage in temporary facilities. In the 8 years prior to 2004-05, feed and residual use during the first three quarters of the year accounted for 83.7 to 85.5 percent of the total for the year. The average was 84.4 percent. If use this year is following an average pattern, use

during the first three quarters points to a total of about 6.12 billion bushels for the year. The USDA projects use at 6.1 billion. Use could be larger than these projections, however, due to the sharp decline in wheat production and much higher wheat prices this summer.

For the year, the USDA projects food, seed, and industrial use of corn at 2.975 billion bushels, 10.8 percent more than used last year. Of the expected increase of 289 million bushels, 277 million is for ethanol production. Total processing use during the first three quarters of the year is estimated at 2.188 billion bushels 10.5 percent more than used during the same period last year. Use during the final quarter needs to total 787 million bushels, or 11.5 percent more than used last year, to reach the USDA's projection for the year. The forecast appears accurate at this point.

It appears that consumption of U.S. corn during the current year will reach 11.205 billion bushels, leaving year ending stocks of about 2.03 billion bushels, or 18.1 percent of expected consumption. Year-ending stocks will be only slightly smaller than stocks at the beginning of the year (Table 2).

Potential Size of 2006 Crop

The USDA's June *Acreage* report showed that U.S. producers planted 79.366 million acres of corn for all purposes in 2006 (Table 3). That estimate is 2.393 million less than planted in 2005, but 1.347 million more than producers indicated in March. About half of the acreage decline occurred in the eastern corn belt and about 30 percent in the southern plains states. More acres were planted in North Dakota. The June survey of acreage estimated that 72.091 million acres of corn would be harvested for grain in 2006, 3.016 million fewer acres than harvested last year. Last year, acreage harvested for grain represented an unusually large percentage of corn planted for all purposes. The estimate of acreage harvested for silage or abandoned in 2006, 7.275 million acres, is typical.

Considerable uncertainty surrounds potential yield of the 2006 corn crop. The growing season has been less than ideal with excessive precipitation presenting a problem in the early spring in the far eastern corn belt and dryness now presenting a problem in far western areas. The USDA's weekly report of crop conditions reflected deteriorating conditions in late June through mid-July. As of July 16, only 62 percent of the crop in the largest

18 corn producing states was rated in good or excellent condition. This compares to 71 percent rated good or excellent on June 25, 2006. At the same time last year, only 55 percent of the crop was rated in either good or excellent condition.

Crop condition ratings for the U.S. corn crop were available beginning with the 1986 crop. Since that time there has been a strong relationship between the percent of the crop rated good or excellent in the last report of the season and the U.S. average trend-adjusted yield. That relationship is estimated as: $\text{yield} = 108.48 \text{ bushels} + .6521 \times \% \text{ of crop rated good or excellent}$. The estimated relationship explains 88 percent of the variation in annual trend-adjusted corn yields over the past 20 years. However, in each of the past 7 years, the U.S. average corn yield has been higher than the yield forecast by crop condition ratings. The difference ranged from 0.4 bushels in 2000 to 7.4 bushels in 2004 and averaged 3.3 bushels. In 2005, the average yield was 4.4 bushels higher than projected based on crop condition ratings. Interestingly, prior to the most recent 7 years, average yields were less than predicted by the model for 4 consecutive years. Except for "extreme" years like 1993 (excessive flooding) and 2004 (exceptional favorable weather) the model has worked reasonably well as a general indicator of average yield.

The obvious difficulty in applying the model is that it is based on the last observation of crop conditions of the season. It's usefulness is in answering the question, If crop conditions remain at current levels, what would be the expected yield? With 62 percent of the crop rated in good or excellent condition, for example, the model would point to an average yield of 148.9 bushels. If the model continues to underestimate yield, however, a rating of 62 percent good or excellent might suggest a yield of 150 to 152 bushels. For each percentage point change in the portion of the crop rated good or excellent, the average yield expectation would change .65 bushels per acre, equal to about 47 million bushels of production.

A 2006 average yield near trend value of 149 bushels per acre would produce a crop of about 10.74 billion bushels. Current crop ratings suggest that a trend yield is attainable, but critical weather is just ahead. The USDA will release the first forecast of 2006 yield potential on August 11, 2006. That forecast will be based on farmer surveys and crop observations in late July. Until

then, the market will continue to take its cue from the crop condition ratings.

Consumption to Grow

Consumption of U.S. corn will continue to grow rapidly during the year ahead, with ethanol use of corn leading the way. The USDA projects that corn used for ethanol production will grow from 1.6 billion bushels this year to 2.15 billion during the 2006-07 marketing year. There is little disagreement that growth will be large. The rate of increase will be determined primarily by the rate of construction of new processing facilities. Numerous facilities are in various stages of planning. Corn used for other food and industrial products is expected to grow by only 10 million bushels, bringing total use to 3.535 billion bushels.

Domestic feed and residual use of corn will be supported by continued profitability of livestock production in 2006-07 and by a small expansion in livestock numbers. The USDA projects a 0.7 percent increase in the number of grain consuming animal units. A significant decline in feeding of other grains will also support feed use of corn, although those quantities are small. The major uncertainty centers around the degree of substitution of corn gluten feed and distillers dried grain for whole corn feeding. Potentially, a 550 million bushel increase in corn used for ethanol production would produce enough by-product to substitute for about 90 million bushels of corn. That substitution could keep the level of corn feeding near the level of this year. USDA projects a 50 million bushel decline in feed and residual use. Based on our forecast for this year, that would put use during the year ahead at 6.07 billion bushels.

There is also potential for exports of U.S. corn to expand modestly in 2006-07 following the surge during the current year. A 2.5 percent reduction in wheat production outside of the U.S. coupled with only a small increase in foreign coarse grain production should keep world demand for U.S. corn at a high level. Argentina is expected to have a larger corn harvest which will allow them to export an additional 120 million bushels of corn during the year ahead, but the Ukraine and Brazil may have fewer bushels to export. The main focus, however, will be on China. China exported about 300 million bushels of corn in 2004-05 and is expected to export about 160 million bushels this year. The USDA projects Chinese exports at

160 million bushels again in 2006-07, which would result in a sharp decline in year ending stocks there. China has purchased small quantities of U.S. corn this year (2.5 million bushels), but no sales have been registered for next year. There is some chance that China could become a more significant importer of corn late in the 2006-07 marketing year.

The USDA currently projects a 50 million bushel increase in U.S. corn exports to all destinations during the year ahead. That projection is used here, but there is the possibility of larger shipments. As of July 13, U.S. exporters had sold 102 million bushels of corn for export during the 2006-07 marketing year. At the same time last year, only 36 million bushels had been sold.

Based on the estimates developed here, consumption of U.S. corn during the year ahead could jump to 11.755 billion bushels, reducing year-ending stocks to 1.026 billion bushels if the 2006 average yield is near trend value. That scenario suggests that price rationing would not be required, but means that production needs to expand in 2007.

Likely Acreage Response

The sharp increase in corn consumption and draw down in U.S. and world inventories of corn during the year ahead suggest that U.S. producers will need to expand production in 2007 and beyond. That expansion will require some increase in acreage in 2007. With December 2007 corn futures trading near \$3.00 it would seem that there is strong incentive to increase corn acreage in 2007. However, the prices of other crops, soybeans and particularly wheat, are also sharply higher for 2007. July 2007 wheat futures at Chicago are near \$4.50, Kansas City near \$4.80, and Minneapolis over \$5.00. In addition, the cost of corn production will likely remain high. Winter wheat producers will be the first to report on 2007 acreage decisions.

Initially, it would seem that planted acreage of corn in 2007 would at least return to the 2005 level near 81.8 million acres, resulting in harvested acreage near 75 million. With a trend yield near 150.5 bushels, however, that acreage would produce a crop of only about 11.3 billion bushels. If potential consumption in 2007-08 is near 12 billion bushels, a crop of at least 11.8 billion will be required. That suggests that harvested acreage needs to be near 78.4 million and planted acreage needs to be near

85.5 million just to avoid price rationing. Will producers, expand corn plantings by 6 million acres in 2007?

Price Prospects

Monthly average U.S. cash corn prices reached a marketing year low of \$1.77 in November 2005 and a high of \$2.17 in May 2006. With the majority of the 2005 crop already priced, it appears that the marketing year weighted average price will be between \$1.95 and \$2.00. Based on our forecast of the year-ending stocks-to-use ratio of 18.12 percent, a marketing year average farm price of \$1.95 would be expected. It appears, then, that cash corn prices are accurately reflecting market fundamentals.

The average daily spot cash price in central Illinois reached a marketing year low of \$1.635 on October 18, 2005. The high to date is \$2.435, established on July 12, 2006. The pattern is very similar to that of the 2004-05 marketing year, when the low was reached on November 4 and the high on July 18. Basis levels continue to be relatively weak, with the average central Illinois price \$.27 under September futures on July 19. That basis is about \$.07 weaker than the weak basis of a year ago. The weak basis reflects higher transportation and interest costs, large supplies of old crop, and likely some speculative premium in the futures market.

Basis for harvest delivery of the new crop is also relatively weak. On July 19, harvest bids averaged \$.36 under December futures in central Illinois, compared to \$.24 at this time last year, \$.22 in 2004, and \$.16 in 2003. Basis in far southern Illinois was \$.42 under December compared to about \$.25 under at this time last year. Again, the weak basis likely reflects increased costs and some speculative premium in the futures market.

For the 2006-07 marketing year, our projections result in a year-ending stocks-to-use ratio of 8.73 percent, suggesting a 2006-07 marketing year average price in the \$2.50 to \$2.55 range. At the close of trade on July 20, December 2006 futures settled at \$2.59, with deferred contracts at progressively higher prices. September 2007 futures settled at \$2.97. Based on the historic relationship between the average monthly cash price received by farmers and the average futures price during the month, and assuming producers spread the sales of the 2006 crop throughout the year in a typical fashion, the futures market

suggested a marketing year average cash price near \$2.60. That price implies a year-ending stocks-to-use ratio of 8.1 percent, or 950 million bushels based on our projections of use. A carryover of 950 million implies a crop of about 10.66 billion bushels and a U.S. average yield of 148.1 bushels per acre. That yield expectation implies that crop condition ratings will continue to decline from the current 62 percent good or excellent to about 58 percent good or excellent.

Current new crop futures appear to accurately reflect prospective fundamentals. Prices will continue to follow weather and crop condition ratings, providing opportunity to price additional quantities of the 2006 crop if December 2006 futures trade above \$2.70. The large carry in the market also makes prices for the 2007 and 2008 crops appear attractive. Some caution is suggested for pricing those crops. Strong demand, a needed increase in acreage, and 2007 weather uncertainty could make those prices very volatile.

The large carry in the market also makes storage of the 2006 crop look attractive. In central Illinois, for example, the harvest bid on July 19 was \$.67 under July 2007 futures price. That large basis implies a large return to storage, depending on the magnitude of basis next spring. At a historical level of \$.10 under in May, the market would be offering \$.57 to cover interest and storage costs. If basis is \$.25 to \$.30 under as it was in May 2006, the market is offering \$.37 to \$.42 to cover storage and interest. With an interest rate of 8.25 percent on a price of \$2.25, the interest cost from October 2006 to May 2007 would be about \$.11. Commercial storage costs from harvest to May would be near \$.22, bring the total cost to about \$.33. Basis conditions differ significantly from area to area and storage costs vary by region and by type of storage-- on farm or off farm. Producers will want to carefully calculate the likely return to storage. In addition, the only way to capture the return that the market is offering is to forward price the crop for delivery after harvest.

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Table 1. Corn Quarterly Balance Sheet

	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	2001-02	2002-03	2003-04	2004-05	2005-06
	million bushels																						
September 1 stocks	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	1,899	1,596	1,087	958	2,114
Production	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	9,915	9,503	8,968	10,089	11,807	11,112
TOTAL ^a	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	11,640	11,412	10,578	11,190	12,776	13,236
September-November																							
Seed, food, ind.	227	244	276	295	296	302	312	338	361	370	383	410	417	388	435	450	459	466	492	549	588	643	697
Export	493	503	415	318	396	471	582	383	421	488	435	449	660	487	380	450	535	507	448	393	470	499	481
Feed, residual	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	2,188	2,131	2,200	1,986	2,166	2,175	2,235
TOTAL	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	3,104	3,140	2,928	3,224	3,317	3,413
December 1 stocks	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	8,530	8,265	7,638	7,954	9,452	9,815
Seed, food, ind.	212	236	262	281	288	301	313	330	362	365	379	410	405	400	425	434	447	465	482	563	609	637	708
Export	506	580	460	313	405	502	682	471	362	463	330	590	562	525	380	465	465	415	448	390	506	440	473
Feed, residual	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	1,529	1,607	1,540	1,557	1,571	1,618	1,648
TOTAL	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	2,488	2,471	2,510	2,686	2,695	2,829
March 1 stocks	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	5,795	5,132	5,271	6,756	6,987
Seed, food, ind.	253	294	307	333	337	353	376	384	414	414	423	452	433	471	470	495	512	514	539	617	676	700	783
Export	513	475	201	496	510	592	601	454	371	411	270	568	610	433	350	497	451	455	497	393	465	427	565
Feed, residual	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	1,058	1,153	1,166	1,141	1,166	1,312	1,281
TOTAL	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	2,203	2,151	2,307	2,439	2,629
June 1 stocks	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	3,597	2,985	2,970	4,321	4,363
Seed, food, ind.	238	293	307	324	331	341	369	374	396	407	429	442	373	460	475	467	496	512	532	611	664	706	
Export	374	292	151	365	406	463	503	419	430	301	293	570	396	353	394	572	485	564	512	411	459	448	
Feed, residual	527	603	499	761	843	685	627	679	816	891	789	846	527	809	865	792	890	951	958	879	892	1,057	
TOTAL	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	1,871	2,027	2,002	1,900	2,015	2,211	
September 1 stocks	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	1,899	1,596	1,087	958	2,114	
Annual																							
Seed, food, ind.	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	1,957	2,046	2,340	2,537	2,686	
Export	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	1,989	1,937	1,941	1,905	1,588	1,900	1,814	
Feed, residual	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	5,468	5,665	5,842	5,864	5,563	5,795	6,162	
TOTAL	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	9,515	9,741	9,815	9,491	10,232	10,662	

^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	2001-02	2002-03	2003-04	2004-05	2005-06 ^a	2006-07
	million bushels																	
Carryin	1,930	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,899	1,596	1,087	958	2,114	2,031
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>9,915</u>	<u>9,503</u>	<u>8,968</u>	<u>10,089</u>	<u>11,807</u>	<u>11,112</u>	<u>10,740</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	11,659	11,412	10,578	11,190	12,776	13,236	12,781
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	1,957	2,046	2,340	2,537	2,686	2,975	3,535
Export	2,367	1,727	1,584	1,663	1,328	2,177	2,228	1,797	1,504	1,981	1,937	1,935	1,905	1,588	1,897	1,814	2,100	2,150
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>5,848</u>	<u>5,864</u>	<u>5,563</u>	<u>5,798</u>	<u>6,162</u>	<u>6,120</u>	<u>6,070</u>
TOTAL	8,120	7,761	7,915	8,471	7,621	9,352	8,548	8,789	8,791	9,298	9,515	9,741	9,815	9,491	10,232	10,662	11,205	11,755
Carryout	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,899	1,596	1,087	958	2,114	2,031	1,026
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	\$1.97	\$2.32	\$2.42	\$2.06	\$1.95	\$2.50

^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	79,551	72,440
2001		76,693	76,109	75,702	68,768
2002		79,047	78,847	78,894	69,330
2003		79,022	79,066	78,603	70,944
2004		79,004	80,968	80,929	73,631
2005		81,413	81,592	81,759	75,107
2006		78,019	79,366		72,091

^a February

Table 4. 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	2001	2002	2003	2004	2005	
	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	133.9	125.2	139.9	148.9	139.2	
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	133.5	125.4	138.5	149.4	143.2	
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	136.3	127.2	142.2	158.4	146.1	
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	138.0	127.6	143.2	160.2	148.4	
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	138.2	130.0	142.2	160.4	147.9	
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	136.9	138.2	129.3	142.2	160.7		

Table 5. United States Corn Production Estimates

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
	million bushels																									
July	7,116	5,200																		
August	7,735	8,315	5,237	7,668	8,266	8,316	7,231	4,479	7,348	7,850	7,418	8,762	7,423	9,214	8,122	8,695	9,276	9,592	9,561	10,369	9,266	8,886	10,064	10,923	10,350	
September	7,940	8,319	4,390	7,552	8,469	8,268	7,141	4,462	7,321	8,118	7,295	8,770	7,229	9,257	7,832	8,804	9,268	9,738	9,381	10,362	9,238	8,849	9,944	10,961	10,639	
October	8,081	8,315	4,259	7,498	8,603	8,220	7,139	4,553	7,449	8,022	7,479	8,938	6,962	9,602	7,541	9,012	9,312	9,743	9,467	10,192	9,430	8,970	10,207	11,613	10,857	
November	8,097	8,330	4,121	7,527	8,717	8,223	7,166	4,671	7,590	7,935	7,479	9,329	6,503	10,010	7,374	9,265	9,359	9,836	9,537	10,054	9,546	9,003	10,278	11,741	11,032	
January	8,201	8,397	4,204	7,656	8,865	8,253	7,064	4,921	7,527	7,933	7,474	9,479	6,344	10,103	7,374	9,293	9,366	9,761	9,437	9,968	9,507	9,008	10,114	11,807	11,112	
FINAL	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	9,915	9,503	8,967	10,089	11,807		