Grain Price OUTLOOK

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SOYBEANS: WILL SOUTH AMERICAN PRODUCTION OFFSET THE SMALL U.S. CROP?

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Summary

The USDA's October forecast for a 2.468 billion bushel U.S. soybean crop pushed prices to the highest level in about six years. The small crop will require a significant reduction in the use of U.S. soybeans during the current marketing year and will result in a draw down in inventories to a pipeline level.

The shortfall in U.S. production is expected to be filled again this year by increased production in South America. The size of that crop, however, will remain in some doubt until early next spring. For the near term, the soybean market will be watching for indications that the necessary reduction in use is or is not occurring. This appears to be a year when prices will peak early in the crop year. However, prices could remain very volatile as the South American growing season unfolds. Prices during the last half of the 2003-04 marketing year will be influenced by prospects for the 2004 U.S. crop. The marketing year average farm price is expected to be near $6.75 comparable to the average in the mid-1990s and well above that of recent years.

Smallest U.S. Crop in Seven Years

The USDA currently forecasts the 2003 U.S. soybean crop at 2.468 billion bushels, 175 million bushels below the September forecast and 394 million below the August forecast. The decline in the projected size of the crop since August (14 percent) is similar to the decline that occurred in 1983 (18 percent). The decline in 1983 mostly occurred in September (Table 1). Other than the current year and 1983, the largest declines in the soybean production forecast from August to October was 7 percent in 1976 and 6 percent inn 1999. The current production forecast is 281 million bushels smaller than the 2002 crop and represents the smallest U.S. crop since 1996.

The U.S. average soybean yield is projected at 34 bushels per acre, 2.4 bushels and 5.4 bushels below the September and August forecasts, respectively (Table 2). The projected yield is 4 bushels below the 2002 average and represents the lowest yield since 1993. Compared to the 2002 averages, the largest yield declines are expected in Iowa (14 bushels), Wisconsin (14 bushels), Minnesota (11.5 bushels), Missouri (6 bushels), and Illinois (6 bushels). Of the 29 states for which USDA makes projections,

average yields are expected to be below last year's average in 12 states. Large increases are expected in some eastern and southeastern states.

Historically, the November soybean yield forecast has not varied substantially from the October forecast. Since 1973, a difference of one bushel or more occurred in only five years (1984, 1990, 1992, 1993 and 1994). The November yield forecast was below the October forecast in nine of the past 30 years. In 1983, the average yield forecast increased in November, the January estimate was above the Novermber forecast, and the final estimate (January 1985) was even larger. The 1983 crop was 119 million bushels (8 percent) larger than the October forecast. At this juncture, there is little basis for expecting the 2003 crop to be significantly larger or smaller than the October forecast.

Consumption Must Decline

The higher soybean and soybean product prices in the spring of 2003 along with a record large South American crop resulted in a slow down in the rate of consumption of U.S. soybeans. The domestic crush during the summer of 2003 was 18.7 million bushels (5 percent) below the crush in the previous year, continuing a slow down that began in the first quarter of the 2002-03 marketing year (Table 3). Exports of U.S. soybeans were record large in the second quarter of the year, remained large in the third quarter, but were at a five year low in the last quarter of the year. Still, marketing year exports were second in size only to last year's shipments. China accounted for 15 percent of U.S. exports in 2001-02 and 26 percent in 2002-03, replacing the European Union as the largest importer of U.S. soybeans. China was also the largest importer of soybeans from all origins, accounting for 32 percent of world imports. Crush and exports of U.S. soybeans during the 2002-03 marketing year totaled 2.661 billion bushels, 103 million below the record use of the previous year.

Residual (unexplained) use of soybeans during the 2002-03 marketing year was very small at 41 million bushels, about 35 million less than normal. The 2002 U.S. crop may have been larger than the current estimate of 2.749 billion bushels, even though the estimate was increased by nearly 20 million bushels in September 2003. Stocks at the end of the 2002-03 marketing year totaled 169 million bushels, more than the 135 to 150 million bushels projected for much of the previous year.

With a crop of 2.468 billion bushels, consumption of U.S. soybeans will have to be reduced significantly during the current marketing year. Assuming that year ending stocks cannot be reduced below about 120 million bushels, only 2.524 billion bushels of U.S. soybeans are available for use of this year. That is 277 million less than consumed last year. However, if last year's consumption (residual use) and production have been under estimated, available supplies may be down by as much as 300 million bushels this year. The USDA projects another small residual use for the current year, 45 million bushels, implying there are 2.479 billion bushels available for seed, crush, and exports. With seed use of about 90 million bushels, only 2.389 billion bushels are available for crush and export. However, if residual use is actually near 75 million bushels, only 2.359 billion bushels are available for crush and export. That is 302 million bushels (11 percent) less than used in those two categories last year. In the short crop years of 1983 and 1988, combined crush and exports were reduced by 14 and 20 percent, respectively. The average marketing year farm price of soybeans was $7.83 in 1983-84, $2.12 above the average during the previous year. The average price in 1988-89 was $7.42, $1.54 above the average of the previous year. It could be argued that prices were higher than needed in both those years because year ending stocks remained well above pipeline levels.

The needed rationing of soybean supplies during the current marketing year is significant, particularly in the face of what appears to be strong export demand from China. How high prices have to go to accomplish the rationing depends on the strength of domestic and world demand for soybean meal and oil and on the size of the supply of soybeans and other oilseeds from other origins. The USDA currently projects 2003-04 oilseed production outside of the U.S. at 270 million tons, 10 percent larger than last year's production (Table 4). Of the 24.8 million ton increase, 11.4 million tons is from a larger soybean production forecast. At 2.205 billion bushels, the USDA's 2004 Brazilian crop forecast is 276 million bushels, or 14 percent, larger than the 2003 crop. Production in Argentina is projected to increase by 56 million bushels (4 percent). Production in Paraguay is expected to be up 13 million bushels and the Chinese crop is projected to be down by 12 million bushels (Table 5).

The larger South American crop is expected to come from a 10 percent increase in area and a repeat of last year's record yields (Table 6). South American soybean area is projected at 35.75 million hectares, or about 88.3 million acres, and the average yield is projected at 42 bushels per acre. Since the latest expansion phase began in 1997, the projections for 2004 represent an 86 percent increase in soybean area and a 150 percent increase in production in South America. The USDA projection for the 2004 South American crop appears to be a little optimistic at this point, but the planting and growing season has just begun. The early discussion centers around some regional dryness, but that is not uncommon for this time of year. All eyes will be on the development of that crop over the next four months.

Consumption Pace Starts Fast

In addition to focusing on South American crop progress, the soybean market will carefully monitor the rate of consumption of the U.S. crop for evidence that declines are occurring. Weekly export inspection and weekly export sales reports from the USDA and monthly crush reports from the Census Bureau are the primary sources of public information on the rate of use of the crop. In addition, USDA reports that monitor livestock and poultry numbers will be watched carefully for signs of reduced feed demand.

Export data from the USDA is currently available through October 16, the first 6.5 weeks of the 2003-04 marketing year. Export inspections during that period were reported at 81.9 million bushels, about 1 percent less than during the same period last year. Unshipped sales as of October 9, 2003 were reported at 380 million bushels, compared to 270 million on the same date last year. Sales of 42 million bushels were reported for the week ended October 9. Importers have been buying aggressively since the release of the USDA's September production forecast. Unshipped sales to China total 74 million bushels, up from 54 million on the same date last year. The European Union, South Korea, Japan, and Mexico all have been buying U.S. soybeans more aggressively than in the fall of 2002. Unshipped sales to unknown destinations (not yet reported) stood at 116 million bushels, up from 74 million at this time last year.

The 2003-04 marketing year for soybean meal and oil began on October 1. Unshipped sales of meal, at 2.1 million tons, are 30 percent larger than sales of a year ago. At 256 thousand pounds, unshipped sales of soybean oil are down about 20 percent from sales of a year ago. The pace of soybean export sales and shipments, relative to that of a year ago, will have to show significantly due to reduced supplies. The current inverse price structure encourages end users to defer use as much as possible.

The Census Bureau estimate of the U.S. crush during September 2003 has not yet been released, but the estimate from the National Oilseed Processors Association indicates that the crush of member

companies was nearly 3 percent larger than the crush of a year ago. As in the case of exports, that rate (seasonally adjusted) will likely have to decline significantly over the next 10 months. The projected level of use of soybeans, both crush and exports, is a statement of availability. Exports are expected to decline relatively more than the domestic crush since domestic meal and oil demand is fairly price inelastic and larger South American soybean supplies are expected to be available to meet world demand. The USDA projects a 6.6 percent reduction in the domestic crush and a 16.7 percent reduction in exports (Table 7). If residual use is underestimated and the crop is not larger than the current forecast, the reduction will have to be even larger.

The smaller domestic crush is expected to result in a 2.8 percent reduction in domestic meal use, following a 2.6 percent reduction last year. Two consecutive years of reduction is unprecedented in recent history (Table 8). Meal exports,at 5 million tons,are expected to drop by 17 percent, to the lowest level in 19 years and imports are projected at 340,000 tons. Domestic oil consumption is projected to decline by 2.4 percent, the first year over year decline in 10 years. Oil exports are projected at 850 million pounds, 60 percent less than exported last year and the smallest annual shipment in 13 years (Table 9).

Price Prospects

The 2003-04 marketing year is one of those rare years when consumption of U.S. soybeans must be reduced. It is a “short crop” year. In general, we have come to expect that prices will reach a marketing year high early in short crop years, forcing a reduction in use, and then decline into the following year as production rebounds to a more normal level.

This year, November 2002 soybean futures traded to about $5.10 in late July on expectations of a crop near 3 billion bushels. The price of that contract moved to about $5.30 in front of the USDA’s August production forecast, jumped to $5.50 following the smaller than expected USDA crop forecast, and moved to near $6.00 before the September forecast on the basis of a hot, dry August. The price moved to $6.25 following the small September forecast, rallied to $7.00 in early October as small yield reports filtered in, and then increased to $7.45 following the USDA’s October crop forecast. The November contract reached the highest level since November 1997 futures hit $7.50 in March 1997. The average spot cash price (overnight bid) in central Illinois reached $7.24 on October 14, the highest price in about six years.

The average price of soybean meal at central Illinois plants in September 2003 was $217.25 per ton, the highest since December 1998. A daily high of $222 was reached on October 14. Similarly, the average price of soybean oil in September was $23.22 per hundred weight, also the highest since December 1998. The daily high reached $28.60 on October 13.

Soybean and soybean product prices are expected to remain relatively high, but in a more sideways pattern for the next few weeks, and perhaps through the end of the year. The size of the November U.S. production forecast, the rate of consumption, and the progress of the South American crop will all be important in determining if prices need to go higher. A record large inversion in the price structure developed in mid-October, with July 2004 futures trading nearly $1.00 lower than November 2003 futures. That inversion is currently near $.75. Clearly, the market is trying to encourage producer sales and discourage consumption in the short run. The magnitude of the inversion also reflects current expectations of a very large South American harvest in 2004. The USDA forecasts the marketing year average price in a range of $6.05 to $6.95. Current spot cash prices are above the upper end of that range.

Unless South American crop prospects deteriorate, the highest prices of the marketing year may well occur before the end of the calendar year. Spreading sales of unpriced soybeans over the next two months seems like a prudent strategy. It is a little risky to be out of the market so early, however, with the uncertainty surrounding the South American crop and the 2004 U.S. crop. If re-ownership appears warranted later, that could be accomplished with futures or options contracts.

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Table 1. United States Soybean Production Estimates

	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
	million bushels																								
August 1	2,130	1,880	2,017	2,293	1,843	2,035	1,959	1,979	2,000	1,474	1,905	1,836	1,869	2,079	1,902	2,282	2,246	2,300	2,744	2,825	2,870	2,989	2,867	2,628	2,862
September 1	2,174	1,831	2,089	2,314	1,535	2,028	2,063	1,980	1,957	1,472	1,889	1,835	1,817	2,085	1,909	2,316	2,285	2,270	2,746	2,909	2,778	2,900	2,834	2,656	2,643
October 1	2,213	1,757	2,107	2,300	1,517	1,972	2,108	1,992	1,968	1,501	1,926	1,823	1,934	2,108	1,891	2,458	2,190	2,346	2,722	2,769	2,696	2,823	2,907	2,654	2,468
November 1	2,236	1,775	2,077	2,300	1,535	1,902	2,129	2,009	1,960	1,512	1,937	1,904	1,962	2,167	1,834	2,523	2,183	2,403	2,736	2,763	2,673	2,777	2,923	2,690	
January 1	2,268	1,817	2,030	2,277	1,595	1,861	2,099	2,007	1,905	1,539	1,927	1,922	1,986	2,197	1,809	2,558	2,152	2,382	2,727	2,757	2,643	2,770	2,891	2,730	
FINAL	2,261	1,798	1,989	2,190	1,636	1,861	2,099	1,943	1,938	1,549	1,924	1,926	1,987	2,190	1,870	2,515	2,174	2,380	2,689	2,741	2,654	2,758	2,891	2,749	

Table 2. United States Soybean Yield Estimates

	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
	million bushels																								
August 1	30.3	27.4	30.2	32.3	29.7	30.5	31.5	32.9	34.7	26.0	32.3	32.5	31.8	35.8	33.8	37.6	36.4	36.3	39.5	39.5	39.2	40.7	38.7	36.5	39.4
September 1	30.9	27.0	31.2	32.6	24.9	30.3	33.2	33.1	34.0	25.9	32.0	32.4	31.0	35.9	34.0	38.2	37.0	35.8	39.3	40.6	37.9	39.5	38.2	37.0	36.4
October 1	31.5	26.0	31.5	32.4	24.7	29.5	33.9	33.3	34.2	26.4	32.6	32.3	33.0	36.3	33.7	40.5	35.5	37.0	39.0	38.7	37.0	38.7	39.2	37.0	34.0
November 1	31.8	26.5	31.0	32.4	25.0	28.5	34.2	33.8	34.1	26.6	32.8	33.7	33.5	37.3	32.7	41.5	35.4	37.9	39.2	38.6	36.7	38.0	39.4	37.5	
January 1	32.2	26.8	30.4	32.2	25.7	28.2	34.1	33.8	33.7	26.8	32.4	34.0	34.3	37.6	32.0	41.9	34.9	37.6	39.0	38.9	36.5	38.1	39.6	37.8	
FINAL	32.1	26.5	30.1	31.5	26.2	28.1	34.1	33.3	33.9	27.0	32.3	34.1	34.2	37.6	32.6	41.4	35.3	37.6	38.9	38.9	36.6	38.1	39.6	38.0	

Table 3. Soybean Quarterly Balance Sheet

	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	2001-02	2002-03
	million bushels																				
September 1 stocks	254.5	344.6	175.7	316.1	536.4	436.4	302.5	182.0	239.1	329.0	278.4	292.3	209.1	334.8	183.5	131.8	199.8	348.5	290.2	247.7	208.0
Production	2,190.3	1,635.8	1,860.9	2,099.1	1,942.6	1,937.7	1,548.8	1,923.8	1,925.9	1,986.6	2,190.4	1,869.7	2,514.9	2,174.3	2,380.3	2,688.8	2,741.0	2,653.8	2,757.8	2,890.6	2,749.3
TOTAL	2,444.8	1,980.4	2,036.6	2,415.2	2,479.0	2,374.1	1,855.3	2,108.8	2,167.0	2,319.6	2,470.8	2,167.0	2,730.0	2,514.1	2,572.8	2,825.6	2,943.8	3,006.3	3,052.0	3,141.3	2,961.3
September-November																					
Crush	284.2	269.6	253.7	267.5	295.8	293.4	275.4	273.0	304.1	322.0	328.2	329.6	346.2	351.4	360.6	395.8	409.3	426.7	420.9	427.5	417.5
Export	245.9	190.6	153.4	166.5	216.5	260.8	138.3	168.5	120.1	167.1	235.9	176.0	230.9	233.6	289.7	365.3	268.5	297.8	315.5	348.6	316.4
Seed, residual	-36.2	48.5	14.8	21.5	10.1	64.6	74.8	56.6	58.8	51.5	70.7	79.8	50.9	95.7	97.4	66.9	78.5	98.9	75.6	89.6	113.8
TOTAL	493.9	508.7	421.9	455.4	522.4	618.8	488.5	498.1	483.0	540.6	634.8	585.4	628.0	681.7	747.7	826.2	758.8	823.4	812.0	865.7	847.7
December 1 stocks	1,950.9	1,471.7	1,614.7	1,959.8	1,956.6	1,755.3	1,366.8	1,610.7	1,684.0	1,779.0	1,836.0	1,573.6	2,102.0	1,833.4	1,825.1	1,999.4	2,186.0	2,182.9	2,240.0	2,275.6	2,113.6
Crush	314.9	262.5	276.4	281.9	320.1	317.3	286.3	304.3	301.4	323.1	335.2	327.2	371.8	359.0	400.7	443.1	408.6	408.1	417.9	447.6	422.0
Export	263.6	234.6	230.2	270.9	233.7	258.9	197.0	217.0	179.7	259.6	255.9	212.7	283.5	278.7	333.1	306.4	243.1	315.4	338.4	422.7	429.9
Seed, residual	26.6	18.8	47.0	35.7	63.8	33.0	-6.7	33.9	12.8	19.6	29.3	12.1	76.5	5.3	35.5	46.9	77.0	63.2	79.8	69.3	60.7
TOTAL	605.1	515.9	553.6	588.5	617.6	609.2	476.6	555.2	493.9	602.3	620.4	552.0	731.8	643.0	769.3	796.5	728.7	786.7	836.1	939.6	912.6
March 1 stocks	1,345.8	955.8	1,061.1	1,371.3	1,339.0	1,146.1	890.2	1,055.5	1,190.1	1,177.3	1,215.6	1,021.6	1,370.2	1,190.4	1,055.8	1,202.9	1,457.3	1,396.0	1,403.9	1,336.0	1,201.0
Crush	260.1	240.0	258.2	262.3	297.2	308.3	270.1	290.7	295.5	304.0	325.4	320.4	361.7	334.0	355.7	404.9	396.4	373.9	405.4	429.6	400.2
Export	216.2	204.2	153.4	226.4	159.3	185.0	135.5	153.2	146.9	148.2	186.7	120.6	216.6	188.5	165.9	120.0	161.9	205.8	220.8	155.0	196.4
Seed, residual	78.9	39.9	41.1	33.7	45.7	-2.5	20.1	15.7	24.2	29.4	20.1	25.3	0.0	44.9	34.3	84.4	50.4	58.9	69.5	66.5	2.0
TOTAL	555.2	484.1	452.7	522.4	502.2	490.8	425.7	459.6	466.6	481.6	532.2	466.3	578.3	567.4	555.9	609.2	608.7	621.8	695.7	651.1	598.6
June 1 stocks	790.6	471.7	608.4	848.9	836.8	655.3	464.5	595.9	723.5	695.7	683.4	555.3	791.9	622.8	499.9	593.7	848.6	774.4	708.2	684.9	602.4
Crush	248.8	210.6	242.1	241.1	265.5	255.5	225.8	278.4	285.9	304.6	290.0	298.4	325.5	324.9	318.7	353.2	375.4	370.1	395.8	395.0	376.3
Export	179.5	113.6	61.1	76.3	147.4	97.6	56.2	84.2	110.4	109.0	91.0	79.7	107.0	150.5	93.0	78.7	127.5	171.6	121.3	137.2	102.5
Seed, residual	17.7	-28.2	-10.9	-4.9	-12.5	0.3	0.5	-5.8	-1.8	3.1	10.1	-31.9	24.6	-35.2	-43.6	-37.9	-1.3	-55.0	-56.6	-55.3	-45.8
TOTAL	446.0	296.0	292.3	312.5	400.4	352.8	282.5	356.8	394.5	416.7	391.1	346.2	457.1	439.6	368.1	393.9	501.6	486.7	460.5	476.9	433.0
September 1 stocks	344.6	175.7	316.1	536.4	436.4	302.5	182.0	239.1	329.0	278.4	292.3	209.1	334.8	183.5	131.8	199.8	348.5	290.2	247.7	208.0	169.4
Annual																					
Crush	1,108.0	982.7	1,030.4	1,052.8	1,178.7	1,174.5	1,057.6	1,146.4	1,186.9	1,253.7	1,278.8	1,275.6	1,405.2	1,369.4	1,435.7	1,595.1	1,589.7	1,578.8	1,650.0	1,699.7	1,616.0
Export	905.2	743.0	598.1	740.1	756.9	801.7	527.0	622.9	557.1	683.9	769.5	589.0	838.0	851.2	881.7	870.4	801.0	973.8	996.0	1,063.5	1,045.2
Seed, residual	87.0	79.0	92.0	85.9	107.0	95.4	88.7	100.4	94.0	103.6	130.2	85.3	152.0	110.4	123.6	160.3	204.6	166.2	168.3	170.1	130.7
TOTAL	2,100.2	1,804.7	1,720.5	1,878.8	2,042.6	2,071.6	1,673.3	1,869.7	1,838.0	2,041.2	2,178.5	1,949.9	2,397.0	2,330.9	2,441.0	2,625.8	2,595.3	2,718.8	2,803.10	2933.3	2,791.9

Table 4. World Oilseed and Soybean Production

	Major Oilseeds			Soybeans		
Year	United States	Ex-United Stated	Total	United States	Ex-United States	Total
			million metric tons			
1977-78	56.5	93.7	150.2	47.95	23.98	71.93
1978-79	58.6	92.0	150.6	50.86	26.62	77.48
1979-80	72.4	98.1	170.5	61.72	31.79	93.51
1980-81	55.8	99.8	155.6	48.77	32.20	80.97
1981-82	64.0	105.5	169.5	54.13	31.93	86.06
1982-83	68.2	110.1	178.3	59.61	33.96	93.57
1983-84	50.4	115.1	165.5	44.52	38.64	84.16
1984-85	59.2	131.7	191.1	50.64	42.50	93.14
1985-86	65.4	130.8	196.2	57.13	39.92	97.05
1986-87	59.4	135.0	194.4	52.87	45.21	98.08
1987-88	60.6	150.0	210.6	52.75	51.06	103.81
1988-89	50.3	153.9	204.2	42.15	53.49	95.64
1989-90	59.3	153.1	212.4	52.35	55.02	107.37
1990-91	60.6	155.1	215.7	52.42	51.57	103.99
1991-92	64.3	160.0	224.3	54.07	53.31	107.38
1992-93	68.4	158.9	227.4	59.61	57.69	117.30
1993-94	59.5	168.4	227.9	50.92	66.58	117.50
1994-95	79.7	181.2	260.9	68.49	69.14	137.63
1995-96	69.1	190.6	259.7	59.24	65.72	124.96
1996-97	74.8	187.0	261.8	64.78	67.40	132.18
1997-98	83.1	203.9	287.0	73.18	84.90	158.07
1998-99	84.4	210.3	294.7	74.60	85.21	159.81
1999-00	82.3	221.1	303.4	72.22	87.68	159.90
2000-01	84.9	228.5	313.4	75.06	100.00	175.06
2001-02	89.8	234.6	324.4	78.67	105.75	184.42
2002-03	83.8	245.2	328.9	74.83	121.53	196.36
2003-04	76.7	270.0	346.8	67.18	132.97	200.15

[1]WASDE Oct. 2003 and earlier.

Table 5. Soybean Production by Country

Year	United States	Brazil[a]	Argentina[a]	Paraguay[a]	China	Other	World	All Foreign
				million bushels				
1970	1,127	76	2	3	254	165	1,627	500
1971	1,176	135	3	4	290	126	1,734	558
1972	1,283	184	10	4	320	66	1,867	584
1973	1,547	289	18	7	367	64	2,292	745
1974	1,215	363	18	8	349	54	2,007	792
1975	1,547	413	26	10	367	46	2,409	862
1976	1,288	460	51	14	242	128	2,183	895
1977	1,762	350	99	12	266	154	2,643	881
1978	1,870	557	136	20	278	167	2,847	977
1979	2,261	376	132	21	274	191	3,255	994
1980	1,798	558	129	22	292	176	2,975	1,177
1981	1,989	471	152	22	342	186	3,162	1,173
1982	2,190	542	154	19	332	200	3,437	1,247
1983	1,636	571	257	20	359	213	3,056	1,420
1984	1,861	672	248	35	356	248	3,421	1,561
1985	2,099	518	268	22	386	272	3,565	1,466
1986	1,943	636	257	35	427	303	3,601	1,658
1987	1,938	662	356	40	457	359	3,812	1,874
1988	1,549	852	235	60	428	387	3,506	1,957
1989	1,924	747	395	58	376	445	3,945	2,020
1990	1,926	579	423	48	404	446	3,826	1,900
1991	1,987	709	410	48	357	435	3,946	1,959
1992	2,188	827	417	64	378	434	4,308	2,120
1993	1,871	908	456	66	563	454	4,318	2,447
1994	2,517	952	459	81	588	460	5,057	2,540
1995	2,177	887	457	88	496	487	4,591	2,415
1996	2,380	1,003	412	102	486	474	4,857	2,477
1997	2,689	1,194	717	110	551	545	5,806	3,117
1998	2,741	1,150	735	112	557	577	5,872	3,131
1999	2,654	1,257	779	107	525	527	5,875	3,221
2000	2,758	1,433	1,021	129	566	525	6,432	3,674
2001	2,891	1,598	1,102	114	566	505	6,776	3,885
2002	2,749	1,929	1,304	143	607	482	7,215	4,466
2003	2,468	2,205	1,360	156	595	570	7,354	4,886

[a] Harvested in the spring of the following year.

Table 6. Planted Acres of Soybeans by Region

	Western Corn Belt[a]		Eastern Corn Belt[b]		Mid-South[c]		Southeast[d]		East Coast[e]		United States	
Region	000 acres	%	000 acres	%	000 acres	%	000 acres	%	000 acres	%	000 acres	%
1976	16,145	32.1	14,530	28.9	13,630	27.1	4,799	9.6	1,122	2.3	50,226	100.0
1979	23,370	32.7	19,620	27.5	18,470	25.9	8,360	11.7	1,591	2.2	71,411	100.0
1986	24,875	41.2	18,300	30.3	10,995	18.2	4,680	7.8	1,535	2.5	60,385	100.0
1987	24,120	41.5	18,580	31.9	10,330	17.8	3,675	6.3	1,475	2.5	58,180	100.0
1988	24,310	41.3	18,680	31.7	10,460	17.8	3,810	6.5	1,580	2.7	58,840	100.0
1989	24,790	40.8	19,020	31.3	10,750	17.7	4,460	7.3	1,800	2.9	60,820	100.0
1990	23,750	41.1	18,490	32.0	10,270	17.2	3,650	6.3	1,635	2.8	57,795	100.0
1991	26,035	44.0	19,420	32.8	8,990	15.2	3,005	5.1	1,730	2.9	59,180	100.0
1992	25,400	42.9	20,000	33.8	8,980	15.2	2,915	5.2	1,715	2.9	59,180	100.0
1993	25,300	42.1	20,410	34.0	9,690	16.1	2,915	4.9	1,770	2.9	60,085	100.0
1994	27,220	44.1	20,510	33.3	9,220	15.0	2,875	4.7	1,795	2.9	61,620	100.0
1995	28,210	45.1	21,130	33.8	9,130	14.7	2,290	3.6	1,735	2.8	62,495	100.0
1996	28,250	44.0	22,370	34.8	9,390	14.6	2,565	4.0	1,620	2.5	64,195	100.0
1997	32,450	46.4	22,610	32.3	10,390	14.8	2,777	4.0	1,778	2.5	70,005	100.0
1998	33,700	46.8	23,650	32.8	10,180	14.1	2,690	3.8	1,805	2.5	72,025	100.0
1999	35,800	48.5	24,100	32.7	9,700	13.2	2,360	3.2	1,770	2.4	73,730	100.0
2000	37,050	49.9	24,050	32.4	9,070	12.2	2,230	3.0	1,926	2.6	74,266	100.0
2001	37,700	50.9	24,650	33.3	7,685	10.4	2,135	2.9	1,905	2.5	74,075	100.0
2002	37,070	50.1	24,740	33.5	8,140	11.0	2,145	2.9	1,870	2.5	73,923	100.0
2003	37,550	51.0	24,100	32.7	7,880	10.7	2,291	3.1	1,832	2.5	73,653	100.0

[a] Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

[b] Illinois, Indiana, Michigan, Ohio, Wisconsin

[c] Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

[d] Alabama, Florida, Georgia, North Carolina, South Carolina

e Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia

Table 6. South American Soybean Area, Yield and, Production, 1988 to Date

	Brazil			Argentina			Paraguay		
	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production
Year	mil. ha.	t/ha.	mil.t	mil. ha.	t/ha.	mil. t.	mil. ha.	t/ha.	mil. t.
1988-89	12.15	1.94	23.60	4.00	1.63	6.50	0.85	1.90	1.62
1989-90	11.55	1.76	20.34	4.95	2.17	10.75	0.98	1.61	1.58
1990-91	9.75	1.62	15.75	4.75	2.42	11.50	0.89	1.46	1.30
1991-92	9.70	1.99	19.30	4.80	2.32	11.15	0.90	1.44	1.30
1992-93	10.63	2.12	22.50	4.90	2.32	11.35	0.98	1.79	1.75
1993-94	11.44	2.16	24.70	5.40	2.30	12.40	1.05	1.71	1.80
1994-95	11.68	2.22	25.90	5.70	2.19	12.50	1.10	2.00	2.20
1995-96	10.95	2.21	24.15	5.98	2.08	12.43	1.10	2.18	2.40
1996-97	11.80	2.27	26.80	6.26	1.81	11.20	1.20	2.31	2.77
1997-98	13.00	2.50	32.50	6.95	2.80	19.50	1.20	2.49	2.99
1998-99	12.90	2.43	31.30	8.17	2.45	20.00	1.20	2.54	3.05
1999-00	13.60	2.51	34.20	8.58	2.47	21.20	1.15	2.52	2.90
2000-01	13.93	2.80	39.00	10.40	2.67	27.80	1.35	2.61	3.52
2001-02	16.35	2.66	43.50	11.40	2.63	30.00	1.42	2.18	3.10
2002-03	18.40	2.85	52.50	12.60	2.80	35.50	1.45	2.69	3.90
2003-04	21.00	2.86	60.00	13.20	2.80	37.00	1.55	2.74	4.25

Source: USDA, FAS

Table 7. Soybean Balance Sheet -- Years Beginning September 1

	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[a]
						million bushels									
Carryin	182	239	329	278	292	209	335	183	132	200	348	290	248	208	169
Production	1,924	1,926	1,987	2,190	1,870	2,515	2,174	2,380	2,689	2,741	2,654	2,758	2,891	2,749	2,468
TOTAL[b]	2,109	2,167	2,320	2,470	2,168	2,729	2,514	2,573	2,826	2,944	3,006	3,052	3,141	2,961	2,645
Crush	1,146	1,187	1,254	1,279	1,276	1,405	1,369	1,436	1,597	1,590	1,578	1,640	1,700	1,616	1,510
Export	623	557	684	770	589	838	851	882	870	805	975	996	1,063	1,045	870
Seed, feed, residual	101	94	103	129	94	151	111	123	159	201	163	169	171	131	145
TOTAL	1,870	1,838	2,041	2,178	1,954	2,394	2,331	2,441	2,626	2,596	2,716	2,804	2,933	2,792	2,525
Carryout	239	329	278	292	209	335	183	132	200	348	290	248	208	169	120
U.S. Average price	$5.70	$5.75	$5.58	$5.60	$6.40	$5.48	$6.77	$7.35	$6.47	$4.93	$4.63	$4.54	$4.38	$5.53	$6.75

[a] Projected

Table 8. Soybean Meal Balance Sheet -- Years Beginning October 1

	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
	thousand tons														
Beginning stocks	173	318	285	230	204	150	223	212	210	218	330	293	383	240	256
Production	27,719	28,325	29,831	30,364	30,514	33,270	32,527	34,210	38,176	37,792	37,591	39,385	40,292	38,100	35,935
TOTAL[a]	27,982	28,688	30,183	30,687	30,788	33,483	32,825	34,524	38,443	38,109	37,970	39,729	40,818	38,500	36,525
Domestic	22,291	22,934	23,007	24,251	25,283	26,542	26,611	27,320	28,895	30,657	30,345	31,643	33,070	32,200	31,300
Exports	5,319	5,469	6,946	6,232	5,356	6,717	6,002	6,994	9,330	7,122	7,332	7,703	7,508	6,050	5,000
TOTAL	27,610	28,403	29,953	30,483	30,639	33,260	32,613	34,314	38,225	37,779	37,677	39,346	40,578	38,250	36,300
Ending stocks	318	285	230	204	150	223	212	210	218	330	293	383	240	250	225
Price[b]	$186.48	$181.38	$189.21	$193.75	$192.86	$162.55	$235.92	$270.90	$185.28	$138.55	$167.70	$173.60	$167.73	$182.00	$205.00

[a] Includes imports

[b] Bulk, Decatur, Illinois 48%

Table 9. Soybean Oil Balance Sheet -- Years Beginning October 1

	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
	million pounds														
Beginning stocks	1,715	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,867	2,358	1,564
Production	13,003	13,406	14,346	13,778	13,951	15,613	15,240	15,752	18,143	18,081	17,825	18,420	18,898	18,405	17,020
TOTAL[a]	14,740	14,728	16,132	16,027	15,574	16,733	16,472	17,821	19,723	19,546	19,427	20,488	21,711	20,814	18,688
Domestic	12,082	12,163	12,246	13,053	12,941	12,916	13,465	14,263	15,262	15,655	16,056	16,210	16,833	17,000	16,600
Exports	1,353	779	1,647	1,419	1,529	2,680	992	2,037	3,079	2,372	1,376	1,401	2,519	2,250	850
TOTAL	13,435	12,942	13,893	14,472	14,471	15,596	14,457	16,300	18,341	18,027	17,432	17,611	19,353	19,250	17,450
Ending stocks	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,867	2,358	1,564	1,218
Average Price[b]	22.3¢	21.0¢	19.1¢	21.4¢	27.1¢	27.6¢	24.75¢	22.5¢	25.8¢	19.9¢	15.6¢	14.2¢	16.5¢	22.0¢	25.5¢

[a] Includes imports

[b] Bulk, Decatur, Illinois 44%