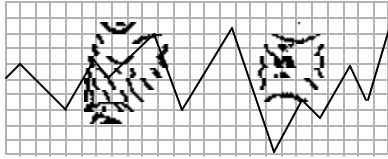




UNIVERSITY OF ILLINOIS
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Grain Price OUTLOOK

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SOYBEANS: PRICE HAS NINE LIVES

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Summary

The USDA's March 1 *Grain Stocks* report, released on March 31, estimated U.S. soybean inventories at 1.202 billion bushels, the smallest inventory on that date in six years. The rate of soybean consumption was large during the second quarter of the 2002-03 marketing year. Domestic crush has slowed, but exports remain large, although there is some confusion about the magnitude of exports. USDA and Census Bureau estimates through January 2003 showed a difference of about 60 million bushels.

The USDA's *Prospective Plantings* report, also released on March 31, revealed producer intentions to plant 73.182 million acres of soybeans in 2003. Those intentions are 576,000 acres below the planted area of 2002, and would represent the fewest acres planted since 1998. Potential harvested acreage in 2003 is very near the level of 2002, if a favorable growing season unfolds.

Soybean prices peaked in September 2002, declined sharply into October, and have moved erratically higher since. The central Illinois spot cash price in early April was at a marketing year high. Continued good export demand, small inventories, reduced U.S. acreage, and concerns about dry weather suggest that prices could be very volatile over the next few months. The market is providing an opportunity to make additional old crop sales, but new crop prices are just approaching the CCC loan rate.

Small Inventory at Mid-Year

At 1.202 billion bushels, March 1, 2003 stocks of U.S. soybeans were at the lowest level for that date since 1997 (Table 1). The stocks figure implied that 912 million bushels of U.S. soybeans were consumed during the second quarter of the 2002-03 marketing year. That is only 28 million (3 percent) less than the huge level of consumption during the same quarter last year. An acceleration in exports during the quarter resulted in a slower rate of decline, relative to last year, than the 4.6 percent reduction during the first quarter of the year.

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The exact level of exports during the first half of the year is confused by the discrepancies among the various sources of export estimates. The Census Bureau estimates (which become the official estimates used in USDA supply and demand reports) are only available through January 2003. Those estimates showed cumulative shipments from September 2002 through January 2003 at 563.2 million bushels, 11.7 percent less than exports reported by the Census Bureau during the same period last year. The USDA's export inspection report showed cumulative shipments during that period at 625.2 million bushels, about 4 percent less than cumulative shipments of the previous year. The USDA *Export Sales* report showed cumulative shipments of 614.8 million bushels, down 2.6 percent from shipments of a year earlier. [By March 27, the USDA export inspection and *Export Sales* report showed identical cumulative shipments of 856 million bushels]. The USDA reports are probably correct, but Census Bureau figures are official. The USDA compensates for the discrepancy with a large estimate of "residual" use of soybeans in its supply and demand estimates.

Through February 2003, USDA figures indicated cumulative exports between 763 and 771 million bushels. Given that Census Bureau estimates were 51.6 to 62 million bushels below the USDA estimates through January, we use an estimate of 700 million bushels for exports during the first half of the year, and an estimate of 402 million during the second quarter (Table 1). As a result, seed, feed, and residual use of soybeans calculates to 198.4 million bushels during the first half of the 2003-03 marketing year. That is 38.5 million more than use during the first half of last year. Similar discrepancies have occurred in the past, most recently in 1994-95 and 1998-99. In both those years, seed and residual use estimates for the year were unusually large.

Based on USDA estimates of exports to date, demand has been much stronger than anticipated at the beginning of the marketing year. Shipments through March 27 (30 weeks into the year) are about 1 percent larger than cumulative shipments of a year ago. Total commitments, shipments plus outstanding sales, as of March 27 were 3 percent larger than commitments of a year earlier. Last year, exports reached a record 1.063 billion bushels, compared to the current USDA official forecast for this year of 960 million bushels and "unofficial" forecast (which includes larger residual use) of 970 million bushels. The strong demand for U.S. soybeans so far this year is coming from China. As of March 27, shipments to China totaled 260 million bushels, 68 percent larger than cumulative shipments of a year ago. An additional 16 million bushels had been sold, but not yet shipped. A year ago, there were no outstanding sales to China as of that date. Shipments to the European Union, traditionally the largest U.S. customer, totaled only 202 million bushels on March 27, 28 percent less than on the same date last year.

The larger purchases of U.S. soybeans by China have come in the face of expectations of a record large harvest of soybeans in South America. The combined harvest currently underway in Brazil, Argentina, and Paraguay is expected to total 3.3 billion bushels, 489 million (17 percent) larger than last year's record harvest (Table 2). The larger production expectation reflects a combination of increased soybean area and higher average yields (Table 3). The USDA projects South American soybean exports during the period October 2002 through September 2003 at 1.26 billion bushels, 140 million more than during the previous year. Exports from South America may also remain large after September 2003. The U.S. share of world oilseed production has dropped from 30 to 26 percent over the past 10 years. U.S. soybean production has dropped from 51 to 38 percent of the world total (Table 4).

The rate of U.S. soybean export sales has slowed in recent weeks and the rate of shipments has dropped sharply. This pattern will continue, as it typically does, as the South American crop becomes available. Still, the USDA's combined projection of exports plus unusually large residual use for the year appears to be too low. The combined use may reach 990 million, compared to the current projection of 970 million. This is reflected in our projection of 980 million bushels of exports and a total feed, seed, and residual use of 180 million bushels (Table 5).

The domestic soybean crush during the first half of the marketing year totaled 839.5 million bushels, 4 percent less than during the same period last year. The crush during the first 4 months of the 2002-03 crop year (October through December 2002) was only off of last year's pace by 2.2 percent. The combined crush, in January and February 2003 was down 7.6 percent from the crush of a year ago. The decline in crush reflects reduced demand for soybean meal. Exports of meal dropped sharply in August, September and October 2002. However, shipments moved above the level of a year ago in December 2002 and January 2003. Still, the USDA *Export Sales* report showed commercial shipments of meal so far in the current marketing year down by 18 percent. Unshipped sales as of March 27 were about equal to those of a year ago. A decline in shipments to the Philippines accounts for most of the year-over-year drop. For the year, the USDA projects meal exports at 6 million tons, 20 percent less than shipped last year (Table 6). Based on current shipments and sales, that appears to be a reasonable projection.

Domestic use of soybean meal during the first four months of the 2002-03 marketing year was 4.7 percent less than during the same period last year. For the year, the USDA has projected a decline of 0.5 percent. Given the reduction in hog and cattle numbers that is occurring and the increased competition from by-product feeds, the decline for the year may be greater. A decline of 2 percent is projected here, but it could be even larger. A 2 percent reduction would put domestic use for the year at 32.4 million tons and total use at 38.4 million tons. Through the first half of the year, the average meal yield per bushel of soybeans crushed was 47.1 pounds. If that yield is maintained, the crush for the year will need to total 1.62 billion bushels to meet the demand for 38.4 million tons of meal, assuming imports of 240,000 tons and no significant change in the year-ending stocks level. A crush of 1.62 billion bushels would imply that 51.8 percent of annual crush occurred in the first half of the marketing year. Over the past 10 years, that percentage has ranged from 51.1 percent to 53.0 percent, and averaged 51.9 percent.

If 1.62 billion bushels of soybeans are crushed this year, about 18.452 billion pounds of oil will be produced. That projection is based on the average yield of oil during the first half of the year (11.34 pounds per bushel) and a typical seasonal increase in yield during the second half of the year – projected at 11.44 pounds. Oil content of the 2002 crop is exceptionally high. Census Bureau export estimates for the first four months of the 2002-03 marketing year showed soybean oil exports of 800 million pounds, compared to 790 million pounds during the same period last year. The USDA's *Export Sales* report as of March 27, 2003 showed commercial exports of 906 million pounds, compared to 1.02 billion pounds on the same date last year (down 11 percent). For the year, the USDA projects a decline of 420 million pounds (17 percent). With current outstanding sales at 380 million pounds, compared to 250 million on the same date last year, the USDA projection appears to be too low. The large decline projected by the USDA during the last half of the 2002-03 marketing year reflects anticipation of a large increase in South American exports and only a modest increase in Chinese imports. We are projecting shipments of 2.25 billion pounds (Table 7). That is 270 million less than shipped last year and 150 million above the current USDA projection.

Apparent domestic consumption of soybean oil during the first four months of the 2002-03 marketing year was 0.7 percent larger than during the same period of a year ago. Monthly estimates of use can contain some "noise" due to fluctuations in inventories at locations other than processing mills. As a result, percentage change in cumulative use can vary as additional information becomes available. For the year, the USDA projects a 2.2 percent increase in use, to a total of 17.3 billion pounds. We are projecting use of 17.2 billion pounds, resulting in year end stocks of 1.427 billion pounds (Table 7).

Based on the projections developed here, consumption of U.S. soybeans during the current marketing year will total 2.78 billion bushels, leaving year end stocks of 160 million bushels. That would be the smallest year-ending inventory in six years (Table 5).

New Crop Prospects

The USDA's *Prospective Plantings* report released on March 31 revealed U.S. producer intentions for planting 73.182 million acres of soybeans in 2003 (Table 8). Those intentions are 576,000 acres less than planted acreage of a year ago and would represent the fewest acres planted since 1998. Planted acreage reached a record 74.266 million in 2000. Intentions reflect a slight acceleration of the rate of decline seen in acreage in 2001 (191,000) and 2002 (317,000).

The report revealed intentions of producers to increase soybean acreage in Minnesota (200,000) and North Dakota (330,000). These increases more than offset expected declines in Kansas, Nebraska, and Missouri. As a result, intentions in western growing areas exceed last year's planted acreage by 130,000 acres (Table 9). Intentions in those states represent 50.8 percent of the U.S. acreage, up from 50.2 percent last year and near the record 50.9 percent in 2001. Intentions in the eastern corn belt are 590,000 acres below planted acreage of a year ago, with only Wisconsin showing an increase (60,000 acres). Intentions in the rest of the country fall 116,000 acres below last year's acreage, with a small increase expected in the southeast.

Nationally, the decline in soybean acreage compared to area of a year ago is being driven by higher prices of other crops, particularly wheat and cotton. Still, intended acreage for 2003 is larger than reflected in pre-report trade estimates, which averaged 72.415 million acres. The March report reflected less switching of acreage from soybeans to corn than generally expected.

Actual planted acreage in 2003 may deviate from intentions, depending on price changes and planting conditions. Since the implementation of new farm policy in 1996 that removed acreage control provisions, planted acreage has exceeded March intentions in one year. The range in differences was from a decline of 2.582 million to an increase of 1.205 million. At this juncture, there is no compelling reason to expect acreage to differ significantly from intentions in 2003, although new crop prices reflect a small economic advantage for corn over soybeans in some areas.

The difference between acreage planted and acreage harvested over the past seven years was as small as 846,000 (1996) and as large as 1.858 million (2000). Unharvested acreage ranged from 1.3 to 2.5 percent of planted acreage, and averaged 1.8 percent. The magnitude of abandoned acres is generally a function of weather. Failed crops due to drought results in more abandonment. For 2003, we tentatively project harvested acreage at 72.1 million acres, reflecting abandonment of 1.5 percent of planted acreage. At that level, harvested acreage would be only 60,000 less than harvested in 2002, even though planted acreage is expected to decline by 576,000.

The U.S. average soybean yield has been in a relatively narrow range over the past seven years. The average spiked to a record 41.4 bushels in 1994 and declined to 35.3 bushels under adverse weather conditions in 1995. Since then, the average yield had a low of 36.6 bushels (1999) and a high of 39.6 bushels (2001). The three bushel range for that extended period is very narrow in relation to yields in the previous 15 years (Table 10). During the period, widespread adverse growing conditions have not been experienced, even though regionally drought conditions have adversely affected yields.

For the current year, it is too early to assess yield potential, so the tendency is to think in terms of trend yield, average yield, or typical yield. The average yield of the past seven years is 38.2 bushels, the average of the five years is 38.2 bushels, and the average of the past three years is 38.5 bushels. Trend yield would be near 40 bushels per acre. As a starting point, we use an expected yield of 39 bushels per acre and an expected 2003 harvest of 2.812 billion bushels. A crop of that size would allow consumption of U.S. soybeans to increase by only 35 million bushels during the 2003-04 marketing year, if year-ending stocks remained unchanged at a relatively small 160 million bushels.

Price Prospects

The average monthly price patterns for soybeans so far in the 2002-03 marketing year have been as follows:

Month	U.S. Average Farm Price	Illinois Average Farm Price	Average Central Illinois Bid Price
Sept. 2002	\$5.39	\$5.52	\$5.61
Oct.	5.19	5.25	5.25
Nov.	5.46	5.57	5.60
Dec.	5.46	5.57	5.56
Jan. 2003	5.52	5.60	5.58
Feb.	5.55	5.68	5.65
March	-	-	5.65

The estimated weighted U.S. average farm price from September 2002 through February 2003 was \$5.38 per bushel. Guessing that the March U.S. average price was near \$5.55, the weighted average price for the first seven months of the year was near \$5.39 per bushel. The average price for the final five months of the year is expected to be higher than during the first seven months, but typically only 26 percent of the crop is marketed during the last 5 months (42 percent) of the marketing year. The average price for the year will likely be near \$5.45, assuming no significant problems with the 2003 crop.

Soybean prices have been fairly erratic, but in a narrow range during the post-harvest period. After rallying to new highs in early September, prices declined sharply into October. That decline was followed by a sharp move up into early January, when new information in USDA reports then sent prices sharply lower by the middle of January. Prices then moved to the highest level since September 2002 in late February, sold off in early March and then moved to a new marketing year high in early April.

The range in the central Illinois spot cash bids has ranged from a high of \$5.94 on April 8, 2003 to a low of \$5.01 on October 19, 2002. The trading range of \$.93 is extremely small by historic standards and it now appears that new highs will be established. Assuming \$5.01 is the marketing year low, a typical trading range would suggest a cash bid of at least \$6.25 at some time before August 31, 2003. These higher prices would have to be generated by a combination of excellent export demand and some concern about the 2003 crop.

November 2003 futures have also traded in a narrow range, from a contract high of \$5.45 in September 2002, to a low of \$4.53 established over a year ago. The life of contract trading range has been as low as \$.90 only once in the previous 30 years (1986 contract). The second smallest range was \$1.17 for the 1995 contract. The range over the past three years (2000 through 2002 contracts) varied from \$1.625 to \$1.875. The lowest contract high for November futures over the past 30 years was \$5.91 for the 2002 contract.

Historical evidence suggests that the trading range on November 2003 futures should expand over the next 9 months and that new contract highs would not be a surprise. As usual, the season for pricing opportunities lies ahead. Little new crop pricing, however, would be recommended until prices move above the CCC loan rate.

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Table 1. 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	2,729.7
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	3,143.3	2,939.7
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	427.7	417.4
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	348.3	297.6
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	89.7	111.1
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	826.1
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	446.6	422.1
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	422.8	402.4
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	70.2	87.3
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	911.8
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	1,201.8
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	
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	150.0	
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	71.5	
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	
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	
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	
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	141.9	
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	-60.0	
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		
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	
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	1,698.9	
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	1,063.3	
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	171.4	
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	2933.1	

Table 2. 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	527	6,434	3,676
2001	2,891	1,598	1,102	114	566	501	6,772	3,881
2002	2,730	1,874	1,286	143	603	492	7,128	4,398

^a Harvested in the spring of the following year.

Table 3. South American Soybean Area, Yield and, Production, 1988 to Date

Year	Brazil			Argentina			Paraguay		
	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production
	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	18.00	2.85	51.00	12.50	2.80	35.00	1.45	2.69	3.90

Source: USDA, FAS

Table 4. World Oilseed and Soybean Production

Year	Major Oilseeds			Soybeans		
	United States	Ex-United States	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	100.04	175.10
2001-02	89.8	233.9	323.7	78.67	105.63	184.31
2002-03	83.5	242.9	326.4	74.29	119.71	194.00

¹WASDE March 2003 and earlier.

Table 5. 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	160
Production	<u>1,924</u>	<u>1,926</u>	<u>1,987</u>	<u>2,190</u>	<u>1,870</u>	<u>2,515</u>	<u>2,174</u>	<u>2,380</u>	<u>2,689</u>	<u>2,741</u>	<u>2,654</u>	<u>2,758</u>	<u>2,891</u>	<u>2,730</u>	<u>2,812</u>
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	2,940	2,975
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	1,620	1,655
Export	623	557	684	770	589	838	851	882	870	805	975	996	1,063	980	990
Seed, feed, residual	<u>101</u>	<u>94</u>	<u>103</u>	<u>129</u>	<u>94</u>	<u>151</u>	<u>111</u>	<u>123</u>	<u>159</u>	<u>201</u>	<u>163</u>	<u>169</u>	<u>171</u>	<u>180</u>	<u>170</u>
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	2,780	2,815
Carryout	239	329	278	292	209	335	183	132	200	348	290	248	208	160	160
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	\$5.45	\$5.45

^a Projected^b Includes Imports

Table 6. 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
	thousand tons													
Beginning stocks	173	318	285	230	204	150	223	212	210	218	330	293	383	240
Production	<u>27,719</u>	<u>28,325</u>	<u>29,831</u>	<u>30,364</u>	<u>30,514</u>	<u>33,270</u>	<u>32,527</u>	<u>34,210</u>	<u>38,176</u>	<u>37,792</u>	<u>37,591</u>	<u>39,385</u>	<u>40,292</u>	<u>38,150</u>
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	38,630
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	33,077	32,400
Exports	<u>5,319</u>	<u>5,469</u>	<u>6,946</u>	<u>6,232</u>	<u>5,356</u>	<u>6,717</u>	<u>6,002</u>	<u>6,994</u>	<u>9,330</u>	<u>7,122</u>	<u>7,332</u>	<u>7,703</u>	<u>7,502</u>	<u>6,000</u>
TOTAL	27,610	28,403	29,953	30,483	30,639	33,260	32,613	34,314	38,225	37,779	37,678	39,346	40,578	38,400
Ending stocks	318	285	230	204	150	223	212	210	218	330	293	383	240	230
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	\$172.50

^a Includes imports^b Bulk, Decatur, Illinois 48%

Table 7. 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
	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	2,877	2,360
Production	<u>13,003</u>	<u>13,406</u>	<u>14,346</u>	<u>13,778</u>	<u>13,951</u>	<u>15,613</u>	<u>15,240</u>	<u>15,752</u>	<u>18,143</u>	<u>18,081</u>	<u>17,825</u>	<u>18,420</u>	<u>18,898</u>	<u>18,452</u>
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	21,821	20,877
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	16,924	17,200
Exports	<u>1,353</u>	<u>779</u>	<u>1,647</u>	<u>1,419</u>	<u>1,529</u>	<u>2,680</u>	<u>992</u>	<u>2,037</u>	<u>3,079</u>	<u>2,372</u>	<u>1,376</u>	<u>1,401</u>	<u>2,520</u>	<u>2,250</u>
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	19,461	19,450
Ending stocks	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,877	2,360	1,427
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¢	21.8¢

^a Includes imports^b Bulk, Decatur, Illinois 44%^c Projected

Table 8. Soybean Planting Intentions, Actual Plantings, and Acres Harvested

Year	January Intentions	Mar./April Intentions	June/July Intentions	Actual	Harvested Acreage
			million acres		
1975	57.5	56.6	54.6	54.6	53.8
1976	50.9	49.3	49.0	50.3	49.4
1977	53.1	55.7	59.0	59.0	57.6
1978	63.9	63.7	64.0	64.7	63.3
1979	66.3	68.8	71.6	71.4	70.3
1980	71.6	71.3	70.3	69.9	67.8
1981	----	69.8	68.5	67.5	66.2
1982	69.5 ^a	---	72.2	70.9	69.4
1983	68.8 ^a	65.8 ^b	63.3	63.8	62.5
1984	65.2 ^a	---	68.0	67.8	66.1
1985	64.4 ^a	---	63.3	63.1	61.6
1986	---	62.0	61.8	60.4	58.3
1987	---	56.9	58.7	58.180	57.172
1988	---	58.0	58.5	58.840	57.373
1989	---	61.7	61.3	60.820	59.282
1990		59.42	58.05	57.795	56.283
1991	58.5	57.12	59.78	59.180	58.169
1992		57.42	59.03	59.180	58.233
1993		59.30	61.58	60.085	57.307
1994		61.12	61.78	61.620	60.809
1995		61.45	63.105	62.495	61.544
1996		62.478	63.895	64.195	63.349
1997		68.800	70.850	70.005	69.110
1998		72.000	72.720	72.025	70.441
1999		73.105	74.205	73.730	72.446
2000		74.871	74.501	74.266	72.408
2001		76.657	75.416	74.075	72.975
2002		72.966	72.993	73.758	72.160
2003		73.182			

^a February 1

^b May 1

Table 9. Planted Acres of Soybeans by Region

Region	Western Corn Belt ^a		Eastern Corn Belt ^b		Mid-South ^c		Southeast ^d		East Coast ^e		United States	
	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	37,020	50.2	24,690	33.2	8,130	11.0	2,135	2.9	1,783	2.4	73,758	100.0
2003	37,150	50.8	24,100	32.9	7,950	10.8	2,176	3	1,806	2.5	73,182	100

^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 10. 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
	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
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
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
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		

Table 11. 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
	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	2,727	2,870	2,989	2,867	2,628
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
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
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		