



# Grain Price OUTLOOK



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## SOYBEANS: RECORD CROP, BUT PRICES MOVE HIGHER

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### Summary

The 2005-06 U.S. soybean marketing year ended with smaller than expected inventories, forcing a downward revision in the estimated size of the 2005 crop. The USDA's October *Crop Production* report forecast a record 2006 crop of 3.189 billion bushels and the USDA's World Outlook Board projected that U.S. soybean stocks would grow from 449 million bushels on September 1, 2006 to a record 555 million bushels on September 1, 2007.

Early projections are for a 4.5 percent reduction in Brazilian soybean acreage to be harvested in 2007, but a 2 percent larger crop if yields rebound from the low levels of the past 3 years. A similar increase in Argentine production is expected, based on expectations of a small increase in acreage and average yields. If those projections materialize, world inventories will establish a new record for the third consecutive year. U.S. producers are expected to reduce acreage in 2007 as corn acreage expands.

November 2006 soybean futures prices traded generally between \$5.90 and \$6.40 from January through mid-August 2006, declined to a contract low of \$5.365 in mid-September, and then rallied to a high of \$6.135 on October 20. The USDA projects the 2006-07 marketing year average farm

price in a range of \$4.90 to \$5.90. The historic relationship between the year-ending stocks-to-use ratio and the average farm price suggests a 2006-07 average near \$5.50, based on the projected stocks-to-use ratio of 17.6 percent. On October 20, the settlement prices of November 2006 through September 2007 futures contracts suggested an average farm price near \$6.00. The average spot cash price in central Illinois was \$5.80. The market appears to be providing some good early season pricing opportunities.

### Large U.S. Supplies

The USDA's October *Crop Production* report forecast the 2006 U.S. soybean crop at 3.189 billion bushels, 126 million larger than the 2005 crop, and 65 million larger than the previous record crop of 2004 (Table 1). The forecast was 96 million bushels larger than the September forecast and 261 million larger than the August forecast. The largest year-over-year increase in production (nearly 17 percent) is forecast for Illinois.

The production forecast reflects a national average yield of 42.8 bushels per acre. That forecast is one bushel above the September forecast and 3.2 bushels above the August forecast, but 0.2 bushels below the record yield of 2005 (Table 2). State average yields are projected at 51 bushels in Illinois and

Nebraska and 50 bushels in Indiana and Iowa.

Based on October revisions, reflecting certified acreage information from the Farm Service Agency, planted and harvested acreage of soybeans were record large in 2006. Planted acreage, at 75.565 million, exceeded 2005 acreage by 3.423 million and exceeded the previous record of 2004 by 357,000 acres (Table 3). The forecast of harvested acreage of 74.505 million exceeds the 2004 record by 547,000. The western corn belt and northern plains states accounted for 51.2 percent of the planted acreage of soybeans in 2006, just below the record 51.3 percent in 2003 (Table 4). Acreage in the southern and eastern areas of the U.S. accounted for only 16.9 percent of the total acreage this year.

In the 34 years since 1972, the January estimate of the size of the U.S. soybean crop has exceeded the October forecast 18 times, was smaller 15 times, and equaled the October forecast once. In 9 of those 34 years, the production forecast was increased in both September and October, like this year.

In those 9 years, the January estimate was above the October forecast 5 times and below 4 times. History provides little guidance on expected change, if any, between the October forecast and the January estimate this year. However, the season-ending crop condition ratings, showing 62 percent of the crop in good or excellent condition, points to an average yield of 42.8 bushels, equal to the USDA's October forecast. However, with a relatively high 18 percent of the crop rated in excellent condition, a slightly higher yield estimate would not be surprising. Changes in harvested acreage estimates should be small. At this juncture, we expect the January production estimate to be close to the October forecast.

### **Consumption to Increase As Well**

U.S. soybean exports were at a modest level of 947.2 million bushels during the 2005-06 marketing year, 155.5 million below the record exports of 2004-05 and the second

smallest in 7 years. Exports were especially small in the first half of the year, but fourth quarter shipments were the highest in 6 years (Table 5). The decline in U.S. exports in 2005-06 reflected an 80 million bushels (18 percent) drop in shipments to China and a 90 million bushel (54 percent) drop in shipments to the European Union. China received 34.4 percent of its total imports from the U.S. last year, down from 45.3 percent in 2004-05. The European Union received 15.3 percent of its imports from the U.S., down from 31.2 percent in 2004-05. The U.S. accounted for 40 percent of exports to all destinations, down from 46.3 percent in 2004-05.

For the current year, the USDA projects U.S. soybean exports at a new record high of 1.145 billion bushels, accounting for 44.1 percent total projected exports from all origins. The majority (nearly 70 percent) of the projected year-over-year increase is in shipments to China. China is expected to import 1.175 billion bushels of soybeans from all sources, accounting for 46 percent of total world imports. China imported 1.04 billion bushels last year.

As of October 12, 6 weeks into the 2006-07 marketing year, the USDA reported that the U.S. had exported 123 million bushels of soybeans, 50 percent more than during the same period last year when shipments started very slowly. Unshipped sales as of October 12 were reported at 331 million bushels, compared to only 220 million on the same date last year. Accumulated shipments plus outstanding sales to China totaled 188 million bushels, up from 100 million at the same time a year ago. Early in the year, it appears that the U.S. export program is on pace to reach the USDA projection.

Exports during the last half of the 2006-07 marketing year will be influenced by the size of the 2007 South American harvest. The USDA currently projects that the 2007 harvest there will reach 3.85 billion bushels, 2.6 percent larger than the record harvest of 2006. Increases are forecast for Brazil (37 million bushels), Argentina (30 million), and Paraguay (26 million) (Table 6). Combined production in Bolivia and Uruguay is forecast

at 100 million bushels, 5 million above the 2006 crop.

The larger crop expectation for Brazil reflects an anticipated reduction in acreage and a rebound in average yield (Table 7). Argentina is expected to have a few more acres and a slightly higher yield, while all of the increase in Paraguay is expected to come from higher yields. There continues to be a wide difference of opinion about the magnitude of planted acreage in Brazil and whether or not Brazil can overcome the yield losses from soybean rust and poor weather in the past three years.

Production of other oilseeds outside of the U.S. in 2006-07 is projected at 156.2 million tons, down from 158.1 million in 2005-06 (calculated from Table 8). The decline reflects prospects for smaller peanut crops in China and India and reduced rapeseed production in China, Canada, Australia, and India. Less competition from these oilseeds supports the prospects for increased world consumption of soybeans.

The domestic crush of soybeans during the 2005-06 marketing year reached a record 1.739 billion bushels, 42.8 million above the crush of the previous year and 39.2 million above the previous record crush in 2001-02. The year-over-year increase occurred in the first quarter and particularly the fourth quarter (Table 5). Soybeans were once again crushed to meet the demand for soybean meal. The year-over-year increase in consumption of U.S. meal, however, came in the export market rather than the domestic market (Table 9). Meal exports were at an 8 year high of 7.85 million tons, while domestic consumption fell just short of the record use of a year earlier. The average oil content of the 2005 soybean crop was record large at 11.67 pounds per bushel. As a result, domestic oil inventories increased to a record 3.029 billion pounds at the end of the 2005-06 marketing year even though consumption increased by 713 million pounds (Table 10).

For the current marketing year, domestic soybean meal consumption should be supported by increasing livestock numbers

and higher grain prices. The sharp increase in availability of distillers grain, however, will provide competition for soybean meal in both the domestic and export markets. An increase in corn used for ethanol production of 550 million bushels will result in an additional 5 million tons of distillers grain. Since distiller grain is lower in protein, it substitutes for soybean meal at a ratio of perhaps 0.55 to one. Five million tons, then, could displace 2.75 million tons of protein meal. Even so, the USDA projects a 0.75 million ton increase in domestic soybean meal consumption and a 0.5 million ton increase in U.S. soybean meal exports during the year. Allowing for imports of 165,000 tons, the USDA projects the domestic crush will need to total 1.775 billion bushels in the 2006-07 marketing year. Allowing for a small draw down in soybean meal stocks, our expectation is that the domestic crush may not reach the USDA projection due to somewhat softer domestic and export demand. We are projecting the crush at 1.765 billion bushels.

If 1.765 billion bushels of soybeans are crushed, about 19.945 billion pounds of soybean oil will be produced this year, if the average oil yield is a more typical 11.3 pounds per bushel. With imports of 55 million pounds and beginning stocks of 3.029 billion pounds, the available supply of oil this year will total 23.029 billion pounds, 650 million larger than last year's supply (Table 10), but 155 million less than projected by the USDA.

Domestic use of soybean oil typically increases at an average of about 2 percent per year, suggesting that use this year might be expected to total about 18.26 billion pounds. The USDA projects use at 19.2 billion pounds to account for the increasing use of soybean oil for bio-diesel production. Public data on the use of soybean oil for bio-diesel production is incomplete. The Census Bureau reports that 178.9 million pounds of once-refined soybean oil was used to produce methyl esters in August 2006. Use was reported at 141.5 million pounds in July, 169 million in June, 146 million in May and 106.6 million in April 2006. Consumption of

crude soybean oil for producing methyl esters is included in the "other inedible products" category, which totaled 60.2 million pounds in August 2006. The rate of increase in use of soybean oil for the bio-diesel industry appears to be larger than implied by the USDA's projection of total domestic use. We use a projection of 19.4 billion pounds, when combined with exports of 1.25 billion, results in a projection of total use of 20.65 billion pounds. Year ending stocks are then projected at 2.379 billion. Stocks are expected to shrink significantly, but remain at the high end of experience prior to 2005-06.

### **Price Prospects**

Based on the analysis here, consumption of U.S. soybeans for all purposes during the current marketing year is projected at a record 3.095 billion bushels, leaving year ending stocks of 546 million bushels (Table 11). A year ending stocks-to-use ratio of 17.64 percent suggests that the 2006-07 marketing year average farm price should be near \$5.50. That price would be generated by an average price of about \$.25 per pound for soybean oil and \$160 per ton for soybean meal. Based on similar analysis, the USDA projects the average in a range of \$4.90 to \$5.90. Given the strong speculative interest in soybean futures and quite high corn and wheat prices, soybean and soybean product prices may be supported at higher levels than suggested by historical relationships between stocks and price. As a result, projections of \$5.75 per bushel for soybeans, \$.255 per pound for soybean oil, and \$165 per ton for soybean meal are used here.

The price of soybeans has increased sharply since mid-September. The average spot cash price in central Illinois increased from \$5.175 on September 15 to \$5.82 on October 19. November 2006 futures reached a contract low of \$5.3675 on September 13 and traded to \$6.135 on October 20. Futures prices for November 2006 through September 2007 translated into an average farm price for the marketing year of \$6.00. Price strength in the face of a record harvest and projection of record U.S. and world stocks is surprising. The combination of heavy speculative buying

and limited short hedging resulting from a slow harvest likely contributed to the sharp rally.

There is a general euphoria about owning agricultural commodities and the influx of traders who appear to be less price sensitive than traditional market participants complicates the task of anticipating future price movements. Strong early season exports, harvest delays, optimism about bio-diesel production and the realization that U.S. soybean acreage will decline in 2007 all appear to be contributing to the early price strength. November futures may have potential to move to the upside of the old trading range, perhaps to the \$6.40 level. Further upside potential would seem to be limited by the size of the projected surplus. Prices, however, will likely be supported by high corn and wheat prices for the near term. Weather in Brazil may be the key for price direction until the first of the year. Harvest time price strength probably represents an opportunity to add to sales of the 2006 crop.

### **How Many Soybean Acres Are Needed?**

With a mounting surplus of soybeans, prospects for large increases in corn consumption, and ideas that winter wheat acreage has increased, most expect that U.S. soybean acreage will decline in 2007. If current U.S. and world projections hold-up, some decline in acreage is warranted. If 2007-08 marketing year ending stocks of soybeans of 250 million bushels are adequate, if the 2007 U.S. average yield is 43 bushels per acre, and if there is a market for 3.14 billion bushels of U.S. soybeans in the 2007-08 marketing year, then harvested acreage in 2007 needs to total 66.1 million. Planted acreage would need to be about 67.1 million, 8.465 million fewer acres than planted in 2006.

Futures settlement prices on October 20 forecast the 2007-08 marketing year average price of corn at \$3.20 and the average for soybeans at \$6.50. That price relationship favors second year corn production over soybean production over a wide geographic area. It is important that the favorable

relationship for corn be maintained into the spring of 2007. The market cannot make the same mistake as in 2006 when it signaled more soybean acreage at the expense of corn acreage.

For the 2008-09 crop year, some would argue that soybean prices will have to move higher in order to encourage U.S. producers to maintain or increase soybean acreage. It is price ratios that matter, not necessarily the level of prices, in making planting decisions.

For now, it makes little sense for a bidding war for acreage to develop in 2007-08. However, soybean prices will likely have to be high enough to encourage some expansion in South American acreage beginning in 2007. July 2008 futures are currently at \$6.80. Based on current production costs, transportation costs, and exchange rates in Brazil, that price is likely high enough to encourage some expansion. Longer term, soybean prices will have to be high enough to keep production expanding in Brazil and corn prices will have to be attractive enough relative to that price to keep corn production expanding in the U.S.

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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	2004	2005	2006
	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	2,877	2,791	2,928
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	2,836	2,856	3,093
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	3,107	2,967	3,189
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	2,452	3,150	3,043	
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	2,418	3,141	3,086	
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	2,756	2,454	3,124	3,063	

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	2004	2005	2006
	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	39.1	38.7	39.6
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	38.5	39.6	41.8
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	42.0	41.6	42.8
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	33.8	42.6	42.7	
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	33.4	42.5	43.3	
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	33.9	42.2	43.0	

Table 3. 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 <sup>a</sup>	---	72.2	70.9	69.4
1983	68.8 <sup>a</sup>	65.8 <sup>b</sup>	63.3	63.8	62.5
1984	65.2 <sup>a</sup>	---	68.0	67.8	66.1
1985	64.4 <sup>a</sup>	---	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	73.963	72.497
2003		73.182	73.653	73.404	72.476
2004		75.411	74.809	75.208	73.958
2005		73.910	73.103	72.142	71.361
2006		76.895	74.930	75.565	74.505

<sup>a</sup> February 1

<sup>b</sup> May 1



Table 4. Planted Acres of Soybeans by Region

Region	Western Corn Belt <sup>a</sup>		Eastern Corn Belt <sup>b</sup>		Mid-South <sup>c</sup>		Southeast <sup>d</sup>		East Coast <sup>e</sup>		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	9,010	12.1	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	8,170	11.0	2,145	2.9	1,838	2.5	73,963	100.0
2003	37,650	51.3	23,770	32.4	7,990	11.3	2,253	3.0	1,741	2.4	73,404	100.0
2004	38,000	50.5	23,550	31.4	9,100	12.1	2,579	3.4	1,979	2.6	75,208	100.0
2005	36,450	50.5	23,010	31.9	8,495	11.8	2,259	3.1	1,928	2.7	72,142	100.0
2006	38,700	51.2	24,100	31.9	8,730	11.6	2,107	2.8	1,928	2.5	75,565	100.0

<sup>a</sup> Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

<sup>b</sup> Illinois, Indiana, Michigan, Ohio, Wisconsin

<sup>c</sup> Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

<sup>d</sup> Alabama, Florida, Georgia, North Carolina, South Carolina

<sup>e</sup> Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia

Table 5. 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	2003-04	2004-05	2005-06
	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	178.3	112.4	255.7
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	2,890.7	2,756.1	2,453.7	3,123.7	3,063.2
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	2,968.8	2,637.6	3,241.7	3,322.9
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	419.4	427.4	442.4
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	348.6	320.4	385.7	405.8	312.6
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	89.6	112.3	140.5	99.3	62.5
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	850.2	945.6	932.4	817.5
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	2,186.4	2,182.7	2,240.0	2,275.6	2,115.4	1,688.7	2,304.6	2,502.1
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	423.2	436.2	437.2
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	425.5	335.1	400.2	311.4
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	69.3	66.9	25.9	88.3	85.1
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	914.4	784.2	924.7	833.7
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	1,202.0	905.8	1,381.4	1,669.2
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	359.5	430.7	431.3
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	194.4	117.6	211.2	185.5
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	6.3	19.1	41.1	62.7
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	600.9	496.2	683.1	679.5
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	410.6	699.3	990.7
Crush	248.8	210.6	242.1	241.1	265.5	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	375.6	327.6	401.8	428.0	
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	137.2	104.1	48.5	85.5	137.7
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	-54.7	-71.0	-41.6	-22.3
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	425.0	299.1	445.8	543.4
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	178.3	112.4	255.7	448.8
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	1,615.3	1,529.7	1,696.1	1,738.9
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	1,063.5	1,045.0	887.2	1,102.7	947.2
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	130.2	108.5	187.2	188.0
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	2,803.1	2,933.3	2,790.5	2,525.5	2,986.0	2,874.1

Table 6. Soybean Production by Country

Year	United States	Brazil <sup>a</sup>	Argentina <sup>a</sup>	Paraguay <sup>a</sup>	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	130	566	506	6,793	3,902
2002	2,756	1,911	1,304	165	607	500	7,243	4,487
2003	2,454	1,874	1,212	144	565	613	6,862	4,408
2004	3,124	1,947	1,433	149	639	643	7,935	4,811
2005	3,063	2,021	1,488	147	601	692	8,012	4,949
2006	3,189	2,058	1,518	173	595	719	8,252	5,063

<sup>a</sup> Harvested in the spring of the following year.

Table 7. 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	1.45	2.45	3.55
2002-03	18.45	2.82	52.00	12.60	2.82	35.50	1.55	2.90	4.50
2003-04	21.52	2.37	51.00	14.00	2.36	33.00	1.75	2.23	3.91
2004-05	22.92	2.31	53.00	14.40	2.71	39.00	2.00	2.03	4.05
2005-06	22.00	2.50	55.00	15.20	2.66	40.50	2.00	2.00	4.00
2006-07	21.00	2.67	56.00	15.40	2.68	41.30	2.00	2.35	4.70

Source: USDA, FAS

Table 8. 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	100.00	175.06
2001-02	89.8	235.3	325.1	78.67	106.20	184.87
2002-03	83.9	245.7	329.6	75.01	122.11	197.12
2003-04	76.6	258.3	334.9	66.78	119.97	186.75
2004-05	95.9	285.3	381.3	85.01	130.94	215.95
2005-06	95.5	292.8	388.3	83.37	134.67	218.04
2006-07	96.4	294.0	390.4	86.78	137.81	224.59

<sup>1</sup>WASDE Oct. 2006 and earlier.

Table 9. 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	2004-05	2005-06	2006-07
	thousand tons																	
Beginning stocks	173	318	285	230	204	150	223	212	210	218	330	293	383	240	220	211	172	300
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>38,213</u>	<u>36,325</u>	<u>40,715</u>	<u>41,631</u>	<u>42,050</u>
TOTAL <sup>a</sup>	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	38,619	36,830	41,073	41,500	42,515
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	32,379	31,449	33,561	33,350	34,020
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>7,508</u>	<u>6,019</u>	<u>5,170</u>	<u>7,340</u>	<u>7,850</u>	<u>8,245</u>
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	38,399	36,619	40,901	41,200	42,265
Ending stocks	318	285	230	204	150	223	212	210	218	330	293	383	240	220	211	172	300	250
Price <sup>b</sup>	\$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	\$181.57	\$256.05	\$182.89	\$174.17	\$165.00

<sup>a</sup> Includes imports<sup>b</sup> Bulk, Decatur, Illinois 48%

Table 10. 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	2004-05	2005-06	2006-07
	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	2,767	2,358	1,489	1,076	1,699	3,029
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>18,438</u>	<u>17,080</u>	<u>19,360</u>	<u>20,345</u>	<u>19,945</u>
TOTAL <sup>a</sup>	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	20,843	18,875	20,462	22,079	23,029
Domestic	12,082	12,163	12,246	13,053	12,941	12,916	13,465	14,263	15,262	15,655	16,056	16,320	16,833	17,089	16,864	17,439	17,900	19,400
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>2,519</u>	<u>2,263</u>	<u>936</u>	<u>1,324</u>	<u>1,150</u>	<u>1,250</u>
TOTAL	13,435	12,942	13,893	14,472	14,471	15,596	14,457	16,300	18,341	18,027	17,432	17,721	19,353	19,352	17,800	18,763	19,050	20,650
Ending stocks	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,767	2,358	1,491	1,076	1,699	3,029	2,379
Average Price <sup>b</sup>	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¢	30.0¢	23.0¢	23.4¢	25.5¢

Table 11. 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	2004-05	2005-06	2006-07 <sup>a</sup>
	million bushels																	
Carryin	182	239	329	278	292	209	335	183	132	200	348	290	248	208	178	112	256	449
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>2,756</u>	<u>2,454</u>	<u>3,124</u>	<u>3,063</u>	<u>3,189</u>
TOTAL <sup>b</sup>	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	2,969	2,638	3,242	3,323	3,641
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	1,615	1,530	1,696	1,739	1,765
Export	623	557	684	770	589	838	851	882	870	805	975	996	1,064	1,045	887	1,097	948	1,145
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>169</u>	<u>131</u>	<u>109</u>	<u>192</u>	<u>188</u>	<u>185</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	2,791	2,526	2,986	2,874	3,095
Carryout	239	329	278	292	209	335	183	132	200	348	290	248	208	178	112	256	449	546
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	\$7.34	\$5.74	\$5.66	\$5.75

<sup>a</sup> Projected

<sup>b</sup> Includes imports