



Grain Price OUTLOOK



A joint publication of the Department of Agricultural Economics, College of Agriculture, Purdue University, West Lafayette, Indiana, and the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign.

SOYBEANS: ARE PRICES LOW ENOUGH?

APRIL 2001

Darrel Good

2001- No. 4

Summary

Exports of the 2000 U.S. soybean crop continue at a very rapid pace as China remains a large buyer. As a result, year ending (September 1, 2001) stocks may be near the level of stocks at the beginning of the year. The record large harvest of 2000 will be consumed. No relief, however, is seen on the supply side. The harvest of the record South American crop is progressing rapidly and the USDA revealed U.S. producer intentions to plant more acres in 2001. The March 30 *Prospective Plantings* report showed soybean intentions for this year at 76.657 million acres, 2.161 million more than the record plantings of 2000. With a trend yield in 2001, the soybean acreage intentions point to a crop in excess of 3 billion bushels, a build-up in stocks, and continued low prices. Price recovery in the short run will require some problems for the 2001 crop. In the longer run, higher prices may require a halt to the acreage expansion in the U.S. and/or South America. For acreage to be reduced in the U.S., an increase in feed grain or wheat prices, or a change in farm policy may be needed. Expansion in South America will only be slowed with persistent low prices.

Old Crop Situation

The USDA's March 1 *Grain Stocks* report revealed soybean stocks of 1.405 billion bushels (Table 1). That estimate is only about 10 million larger than stocks of a year

ago and about 15 to 20 million bushels smaller than expected. The domestic crush of soybeans during the second quarter of the marketing year totaled 417.8 million bushels, a 9.7 million bushel increase from last year's crush. For the first half of the year, the crush was up only 3.9 million bushels (0.5 percent). The domestic crush will continue to be driven by soybean meal demand, as soybean oil remains in surplus. Domestic meal consumption will be supported by profitable livestock prices, a modest expansion in hog and broiler production, and by low prices of soybean meal. In the January newsletter, we projected a 3 percent increase in domestic meal consumption for the year. The USDA currently projects just over a 3 percent increase. Domestic use of meal during the first four months of the marketing year (October 2000 through January 2001) was up 6.7 percent from use of a year ago. In light of the smaller than expected increase in hog numbers reported on March 30 (and the smaller than expected hog slaughter in the first quarter of 2001), the rate of increase in domestic soybean meal use has probably slowed since January. A 2 percent increase in domestic use during the last eight months of the year, would bring use for the year to 31.485 million tons for the year, up 3.6 percent for the year (Table 2).

Soybean meal exports were sluggish during the first quarter of the marketing year, down 20 percent from the same quarter last year. Exports accelerated in January 2001, according to Census Bureau figures. As of March 29, 2001, the USDA's *Export Sales*

report indicated that cumulative commercial shipments of meal were above 4 percent larger than on the same date last year. The increase was led by shipments to the European Union, Indonesia, and South Korea. Shipments to Central and South American countries were down sharply. On March 29, unshipped sales of soybean meal totaled only about 817,000 tons, 11 percent less than on the same date last year.

Restrictions of feeding of meat and bone meal in Europe will continue to support soybean meal consumption there. However, large South American supplies are now available for that market. The implication of foot-and-mouth disease and livestock slaughter in Europe for soybean meal demand is unclear. To date, the effects have been minimal. Based on performance to date, soybean meal exports may exceed the USDA projection of 6.75 million tons, down 8 percent from exports of last year. We are using a projection of 7 million tons (Table 2).

Based on the projections developed here, soybean meal consumption for the marketing year is expected to reach 38.485 million tons, 775,000 more than consumed last year and 385,000 above the current USDA projection.

During the first half of the marketing year, the average soybean meal yield was 47.92 pounds per bushel of soybeans. That yield tends to be fairly consistent through the marketing year. Allowing for imports of 50,000 tons and a draw down in year ending stocks of 43,000 tons, meal use of 38.485 million tons implies a marketing year crush of 1.606 billion bushels (Table 3). That is essentially the same projection we made in January, but is 16 million above the current USDA forecast. The projection of 1.606 billion implies that 52.2 percent of the marketing year crush occurred in the first half of the marketing year. The average for the past five years was 52.4 percent.

If 1.606 billion bushels of soybeans are crushed, about 18.067 billion pounds of oil will be produced, assuming an average yield of 11.25 pounds of oil per bushel of soybeans (Table 4). The average yield in the first half

of the year was 11.2 pounds, but the average yield in the last half is typically higher. During the first four months of the 2000-01 marketing year, domestic soybean oil consumption was 3 percent larger than during the same period last year. That is in line with the long term trend increase and is expected to persist for the remainder of the year. If so, domestic use for the year will reach 16.537 billion pounds. Soybean oil exports through the first four months of the year were nearly 6 percent smaller than exports during the same period last year. As of March 29, commercial exports of soybean oil were about 5 percent larger than a year ago. Unshipped sales, however, were down sharply from sales of a year ago. In addition, much of the soybean oil exports are not commercial sales (45 percent were not commercial sales last year). For the year, the USDA projects soybean oil exports near the level of last year, 1.4 billion pounds. Production of major oilseeds outside of the U.S. is about the same as during the 1999-00 marketing year (Table 5). However, world palm oil production is up nearly 6 percent and is providing stiff competition for U.S. soybean oil. In addition, exports of soybean oil from South America are expected to increase about 4.5 percent due to the very large crop. We are using an export projection of 1.4 billion bushels for the current U.S. marketing year, but are concerned that shipments may fall short. Based on projections developed here, year ending stocks of U.S. soybean oil will be burdensome, at 2.2 billion pounds (Table 4).

U.S. soybean exports during the second quarter of the marketing year were estimated at 328.4 million bushels, based on Census Bureau and USDA export inspection figures. That is an increase of 13 million bushels from exports of the second quarter last year. For the first half of the year, exports were up nearly 31 million bushels (5 percent). Since March 1, export inspections have remained large. Cumulative shipments through April 5 were about 8 percent larger than on the same date last year. The USDA projects exports for the year at 990 million bushels, up 17 million from exports of a year ago. The increase in exports so far this year have been to China – up 69 percent from shipments of a

year ago. Shipments to the largest buyer, the European Union, are down about 5 percent. As of March 29, about 107 million bushels of U.S. soybeans had been sold for export but not yet shipped. On the same date last year, unshipped sales totaled only 85 million bushels. The increase from last year reflects large outstanding sales to China and Mexico. Current export commitments represent 91 percent of the USDA projection for the year, with 21 weeks left in the marketing year.

Weekly shipments need to average just over 8 million bushels per week from now through August in order to meet the USDA projection. Shipments averaged 26.2 million per week during the first 31 weeks of the year. Export shipments will slow as the record 2.37 billion bushel South American crop comes to market (Table 6). Even with a rapid slow down in U.S. exports expected as the South American crop comes to market, it appears that shipments for the year may exceed the USDA projection. It appears that only large cancellations by China would prevent exports from reaching one billion bushels this year. If exports reach that level, year ending stocks will total 287 million bushels, about the same as stocks at the beginning of the year. The market has done its job. Prices have been low enough that the entire 2000 crop will likely be consumed.

New Crop Prospects

The USDA's March 30 *Prospective Plantings* report revealed producer intentions to plant 76.657 million acres of soybeans in 2001, 2.161 million above the record acreage of 2000 (Table 7). Soybean acreage will apparently increase for the ninth straight year and will be nearly 19 million (33 percent) larger than acreage planted in 1990. That acreage was at the lowest level since 1976.

The increase in soybean acreage continues to come in western growing areas. Broadly defined, the western corn belt states represent 50.6 percent of the 2001 soybean planting intentions (Table 8). That compares to a 41.1 percent share in 1990 and a 32 percent share in 1976. The share of acreage in the eastern corn belt has been more stable, and represents 32.7 percent of

intentions for this year. Acreage has declined sharply in southern producing areas. Those states account for only 14.2 percent of the acreage for the upcoming year, with acreage declining from that of last year.

Compared to last year, the largest increases in soybean acreage are planned in North Dakota (500,000); South Dakota, Iowa, and Minnesota (300,000 each); Wisconsin (250,000); and Illinois, Nebraska, and Ohio (200,000 each). The intentions in North Dakota represent a 26 percent jump from last year and is coming at the expense of corn, wheat, barley, sunflowers, and dry beans. North Dakota producers also plan a 330,000 acre increase (26 percent) in canola acreage.

In most years, actual acreage planted to soybeans differs from March intentions. Last year, acreage was 375,000 below March intentions. In the previous nine years, actual acreage was from 25,000 to 2 million above March intentions. With depressed prices of feed grains and wheat, and a bit of a slow start to the planting season, actual acreage this year is not expected to fall short of intentions.

Unharvested acreage of soybeans is typically very small in most years, but can exceed 1.5 million acres in years of regional droughts. The most abandoned acres in recent history, however, was the nearly 2.8 million acres in the flood year of 1993. Planted acreage of 76.657 million, would likely result in harvested acreage near 75.4 million if the 2001 crop experiences generally favorable weather conditions.

The U.S. average soybean yield has been very stable for the past five years, ranging from 36.6 bushels (1999) to 38.9 bushels (1997 and 1998). The five year average yield was 38 bushels per acre. The record yield was 41.4 bushels per acre in 1994 (Table 9). The U.S. average yield was below trend in both 1999 and 2000 due to significant dry areas. In 1999, the eastern U.S. suffered generally dry conditions through much of the growing season. In 2000, western regions had some very dry areas and a hot, dry week in the third week of August reduced yield potential in eastern areas. In each of the four

years, the USDA has judged yield potential to be above 39 bushels in early August. The August estimate was 40.7 bushels last year. The acreage shift from the southern U.S. to the Dakotas this year probably does not influence the overall yield potential of the crop. With a generally favorable growing season, a national average yield of 40 bushels per acre should be expected. At this time, the production potential for 2001 appears to be about 3.015 billion bushels, 245 million above the record crop of 2000. Production will apparently remain large for the fifth consecutive year (Table 10).

The domestic crush of soybeans should remain large during the 2001-02 marketing year to meet growth in domestic meal and oil consumption. Limited growth in meal and oil exports is expected, however, due to competition from South American supplies, at least early in the marketing year. A 25 million bushel increase in the domestic crush would accommodate a 2 percent increase in domestic meal use, bringing the total for the year to about 1.63 billion bushels.

Prospects for U.S. soybean exports hinge on a number of factors, including Chinese production and imports and South American production in 2002. The assumption is that China will continue to import large quantities of soybeans during the 2001-02 marketing year. The growth in South American soybean production has been fueled by increased acreage, particularly in Argentina in 2000-01, and by consistently high yields since 1997 (Table 11). All of the evidence suggests that there is still interest in expanding soybean production, as well as other crops, in Brazil. Barring weather problems, another large crop can be anticipated for 2002. Even if U.S. exports can maintain the current pace of one billion

bushels during the upcoming marketing year, year ending stocks would balloon to 495 million bushels.

Price Prospects

Monthly average prices for soybeans, meal, and oil for the 2000-01 marketing year to date were as follows:

	Soybeans ^a	Meal ^b	Oil ^c
Month	\$/bu	\$/T	¢/lb
Sept. 2000	\$4.67	—	—
Oct.	4.51	163.61	13.50
Nov.	4.65	170.78	13.37
Dec.	4.92	187.90	13.11
Jan. 2001	4.62	175.60	12.53
Feb.	4.44	158.34	12.37
Mar.	4.35	149.10	13.91
^a Central Illinois farm price ^b Bulk, 44% protein, Decatur, IL ^c Bulk, Decatur, IL			

The average price of soybeans in central Illinois during the first seven months of the year was \$4.59, about \$.85 below the average loan rate in central Illinois and about \$.10 below the average during the same period last year. Prices peaked in December, and the March average was \$.62 below the average for March 2000. The average monthly price of soybean meal during the first six months of the year was \$167.55, about \$13.50 above the average of that period last year. However, meal prices peaked in December 2000 and dropped under year-earlier levels by March 2001. Soybean oil prices averaged 13.13 cents per pound during the first half of the year, about 2.5 cents below the previous year average. Prices bottomed in February, but still remained below the level of a year ago during March.

The job of the soybean and soybean product markets has been to make prices attractive to end users so that surplus stocks do not accumulate. With large competing supplies in South America, extremely low prices have been required, but the mission has been accomplished (except for soybean oil). The average prices for the 2000-01 marketing year are expected to be near \$4.60 for soybeans, 13.6¢ for soybean oil, and \$160 for soybean meal (44% protein).

It appears that the soybean market will have the same challenge next year. If a trend line yield is experienced in the U.S. and South America avoids significant problems, the average price of soybeans will be lower in 2001-02 than during the current year. If palm oil production declines, soybean oil prices could muster a little strength after reaching 30 year lows, but meal prices are expected to remain under pressure. An average soybean price of \$4.40 is projected for next year, assuming no production problems. The current market (November 2001 futures at \$4.40) is offering a marketing year average price of about \$4.35 per bushel.

What To Do

For new crop (2001) soybeans, there is little incentive for any pricing at current levels. The price is well below the loan rate and near the average expected for the year. The marketing loan program provides a price floor.

Old crop inventories for which the loan deficiency payment has been established are at risk. Those inventories should be priced on any strength that occurs over the next few weeks, or replaced with slightly out-of-the-money call options, given the lack of carry in the market.

Prospects for longer term improvement in soybean prices hinges on a cut back in production. The current U.S. farm program, however, encourages soybean acreage at the expense of feed grains and wheat. South America shows no inclination for a roll-back in production. Without a change in one of these areas, only periodic weather problems will push prices higher.

Issued by Darrel Good
Extension Economist
University of Illinois

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	
	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	
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	2,769.7	
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	3,062.9	
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	
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	
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	86.7	
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	823.1	
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	2,239.8	
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	417.8	
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	328.4	
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	88.1	
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	834.3	
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	1,404.8	
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		
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		
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		
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		
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		
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		
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		
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		
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		
September 1 stocks Annual	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		
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		
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		
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		
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		

Table 2. 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 ^c
	thousand tons											
Beginning stocks	173	318	285	230	204	150	223	212	210	218	330	293
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>37,623</u>	<u>38,392</u>
TOTAL ^a	27,982	28,688	30,183	30,687	30,788	33,483	32,825	34,524	38,443	38,109	38,003	38,750
Domestic	22,291	22,934	23,007	24,251	25,283	26,542	26,611	27,320	28,895	30,657	30,378	31,485
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>7,331</u>	<u>7,000</u>
TOTAL	27,610	28,403	29,953	30,483	30,639	33,260	32,613	34,314	38,225	37,779	37,710	38,485
Ending stocks	318	285	230	204	150	223	212	210	218	330	293	250
Price ^b	\$173.94	\$170.00	\$176.00	\$181.85	\$180.00	\$151.00	\$225.00	\$260.40	\$175.00	\$131.83	\$159.55	\$160.00

^a Includes imports

^b Bulk, Decatur, Illinois 44%

^c Projected

Table 3. 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 ^a	2001-02 ^a
	million bushels												
Carryin	182	239	329	278	292	209	335	183	132	200	348	290	287
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>2,770</u>	<u>3,015</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	3,063	3,305
Crush	1,146	1,187	1,254	1,279	1,276	1,405	1,369	1,436	1,597	1,590	1,579	1,606	1,630
Export	623	557	684	770	589	838	851	882	870	805	973	1,000	1,000
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>164</u>	<u>170</u>	<u>180</u>
TOTAL	1,870	1,838	2,041	2,178	1,954	2,394	2,331	2,441	2,626	2,596	2,716	2,776	2,810
Carryout	239	329	278	292	209	335	183	132	200	348	290	287	495
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	\$4.60	\$4.40

^a Projected

^b Includes Imports

Table 4. 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 ^c
	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
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>17,824</u>	<u>18,067</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	20,137
Domestic	12,082	12,163	12,246	13,053	12,941	12,916	13,465	14,263	15,262	15,655	16,055	16,537
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>1,400</u>
TOTAL	13,435	12,942	13,893	14,472	14,471	15,596	14,457	16,300	18,341	18,027	17,432	17,937
Ending stocks	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,200
Average Price ^b	22.3¢	21.0¢	19.1¢	21.4¢	27.1¢	27.6¢	24.75¢	22.5¢	25.8¢	19.9¢	15.60¢	13.6¢

^a Includes imports

^b Bulk, Decatur, Illinois 44%

^c Projected

Table 5. 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	210.2	294.6	74.60	85.15	159.75
1999-00	82.3	220.1	302.4	72.22	87.21	159.44
2000-01	85.3	221.5	306.8	75.38	94.91	170.28

¹WASDE April 10, 2001 and earlier.

Table 6. 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	110	557	580	5,870	3,129
1999	2,654	1,249	779	107	525	553	5,858	3,204
2000	2,770	1,304	955	114	577	537	6,257	3,487

^a Harvested in the spring of the following year.

Table 7. 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	74.496	(72.718)
2001		76.657			(75,400)

^a February 1

^b May 1

Table 8. 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	49.7	24,200	32.5	9,110	12.3	2,250	3.0	1,886	2.5	74,496	100.0
2001	38,800	50.6	25,050	32.7	8,660	11.3	2,215	2.9	1,932	2.5	76,657	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 9. 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
	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
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
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
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
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
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	

Table 10. 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
	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
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
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
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
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
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	

Table 11. 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	2.50	3.00
1999-00	13.60	2.50	34.00	8.57	2.47	21.20	1.15	2.52	2.90
2000-01	13.60	2.61	35.50	9.85	2.64	26.00	1.25	2.48	3.10

Source: USDA, FAS