

AUGUST 4, 1997

CORN AND SOYBEAN PRODUCTION PROSPECTS FADE

The season started with a lot of promise for the corn and soybean crops. Corn planting was the earliest since 1992 and soybean planting was the earliest since 1988. Much of the benefit of that early planting was lost to cool weather in May. By the end of June, however, crop ratings were quite high for both crops. Those ratings have declined significantly since the first week of July. Crop conditions are better than a year ago at this time, but last year ratings improved through the rest of the growing season. Recent dry weather in significant portions of the corn belt suggests further deterioration in crop condition ratings this year.

The trend towards drier weather as the summer progresses has some similarities to 1991. The U.S. average corn yield in 1991 was 108.6 bushels per acre, 9.9 bushels below the 1990 average and 11.2 bushels below the previous record yield of 1987. The yield decline in 1991 was generally most severe in the eastern corn belt – Illinois (20 bushels), Indiana (37 bushels), and Ohio (25 bushels). Compared to 1990, the average yield declined 9 bushels in Iowa, 4 bushels in Minnesota, and 1 bushel in Nebraska. The yield in Wisconsin increased by 1 bushel. The USDA's *Crop Production* report revealed the low yield in August, with an estimate of 107.8 bushels per acre. The yield estimate did not change by more than 1 bushel from August through the following January.

For soybeans, the 1991 U.S. average yield of 34.2 bushels was record large and 0.1 bushel higher than the 1990 yield. Yields declined in the corn belt -- 1 bushel in Iowa and Nebraska, 1.5 bushels in Illinois, 2 bushels in Indiana, 2.5 bushels in Minnesota, and 3 bushels in Ohio. Yields were much higher in the southeast and Delta states. The USDA's yield estimate for the U.S. started at 31.8 bushels in August, declined to 31 bushels in September and then increased in October, November, and January. Corn yields were determined more by July weather and soybean yield by August weather.

December 1991 corn futures established a low of \$2.20 on July 8, 1991 and then rallied to a high of \$2.72 on August 2. That was \$.03 below the contract high established in June 1990. Prices of the nearby futures traded roughly between \$2.40 and \$2.60 through January 1992, rallied to \$2.85 in March on the basis of El Nino drought talk, and then declined to \$2.10 as a record crop developed in 1992.

December 1997 corn futures traded to a low of \$2.275 on July 7, 1997 and have since rallied to a high of \$2.74 on August 4. The similarities with the 1991 price action are striking, but will

they persist? In the 1991-92 marketing year, beginning corn inventories were 1.521 billion bushels, compared to a projection of 916 million bushels this year. Corn exports declined by 141 million bushels, compared to a projected increase of 225 million bushels for 1997-98. Harvested acreage of corn increased by 4.25 million acres in 1992 and the corn crop was record large. Foreign coarse grain production was also record large in 1992. Corn stocks at the end of the 1991-92 marketing year declined to 1.1 billion bushels. Based on current projections of consumption, a crop of less than 9.5 billion bushels this year would keep ending stocks under 1 billion bushels. Current corn market fundamentals appear much stronger than in 1991-92, suggesting prices could remain higher than in 1991-92.

November 1991 soybean futures established a contract low of \$5.17 on July 10, 1991, rallied to \$6.50 on August 2, and declined to \$5.40 by the end of October. July 1992 futures recovered to \$6.35 in June 1992, but declined to \$5.55 at expiration.

November 1997 soybean futures traded to a low of \$5.77 on July 7, 1997 and rebounded to \$6.67 on August 4. The action was very similar to the price action in 1991-92. Whether or not the similarity persists will depend very much on August weather conditions. However, market fundamentals have some similarities to 1991-92 when U.S. production increased, exports increased, foreign soybean production increased, and ending stocks were abundant Planted acreage remained the same in 1992 as in 1991, but the average yield and production were record large. Prices may well be more volatile in 1997-98 than in 1991-92 due to increased demand and the growth in production in South America.

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