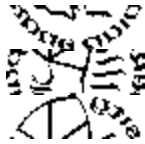




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DELAYED PLANTING IMPACTS ON YIELDS AND PRICES?

It has been wet in much of the eastern corn belt and some farmers are still looking anxiously for the day they can say their 2002 crop is in the ground. As of June 2nd, there remained 3.7 million acres of unplanted corn and 7.8 million acres of unplanted soybeans in Illinois, Indiana, and Ohio. The market must evaluate how large of an impact these delays will have on yields and prices for the 2002 crops.

A review of past delayed planting years provides some general clues, but little in terms of concrete conclusions. First delayed corn planting has tended to have a statistically significant impact toward reducing national corn yields during the 1980 to 2001 time period. In fact, the magnitude of delay this spring would suggest a four to five bushel reduction if weather was average for the rest of the growing season.

The most important point is that final yields depend more on summer and early fall weather than on planting date. In fact, while delayed corn planting may have reduced corn yield potential by four or five bushels, average yield variability in summer weather can add or detract about 11 bushels to that average. If one reduces the USDA's initial 138 bushel per acre yield by five bushels for late planting to 133 bushels, and then adds and subtracts 11 bushels, this suggests that there is about a two out of three chance that yields would fall between 122 bushels and 144 bushels per acre. Thus, it is clearly possible to have yields at, or even above the 138 bushels per acre USDA estimate, but the odds have been reduced.

The key variable in determining final yields for the year will be weather this summer and fall. In general, the best possible forecast is for a moderate summer that is somewhat cooler with more moisture than normal and for a warm period in the early fall to help crops avoid a killing frost before maturity. The forecast from the National Weather Service tends to favor this scenario with its forecast for June-July-August showing normal temperatures and somewhat higher than normal rainfall. However, it also appears that the higher than normal precipitation is primarily a result of higher June rainfall which has actually been detrimental to getting planting completed. The worst weather scenario for yields is a hot/dry summer with an early frost. The year 1974, is remembered by many as such a summer/fall after a much delayed planting season.

In more recent history the impact on corn yields in years when planting has been delayed are mixed. Late seeding in 1991, 1993, and 1995 contributed to yields being below trend by nearly 12 percent on average. However in 1996, a cool/moist summer and extended fall allowed corn yields

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to be near normal, and in 1998, corn planting was delayed in early May, but completed rapidly in late May with yields being about 2 percent above average. Thus the two most recent years of delayed corn planting have seen national yields at least at, or above the trend levels. This is likely one reason that the weather premium has been small on corn this year.

Price patterns are somewhat different in delayed planting years? Since the crop has a late start, the normal drop in new crop futures prices does not start as early and does not drop as much on average. For example, looking at December futures for the years 1990 to 2000 the price dropped from June 10th to July 10th on average about 15 cents per bushel for corn, and an additional 4 cents per bushel from July 10th to August 10th. In the late planted years, of 1991, 1993, 1995, 1996, and 1998, the price increased about 2 cents from June 10th to July 10th and then fell by an average of only 5 cents from July 10th to August 10th.

November soybean futures exhibited a similar pattern. In all years from 1990 to 2000, prices fell from June 10th to July 10th by 16 cents on average, and by an additional 6 cents per bushel to August 10th. In the delayed planting years however, prices rose from June 10th to July 10th by 26 cents per bushel before dropping 12 cents per bushel from July 10th to August 10th.

These patterns would encourage holding of old crop stocks and delaying the pricing of new crop corn and soybeans somewhat as summer weather patterns become more defined. However, that generally should not be beyond the 10th of July, unless one is willing to take on the considerable downside risk associated with the total elimination of the weather premium.

There are other reasons that the full effects of delayed planting are not known until very late in the growing season. Weather is the primary one, but the full impact of a wet spring on total acreage is not known until the final acreage report in January. In the delayed planting years from 1990 to 2001, the average final corn acreage planted was 1.7 million acres below the number reported in the March *Prospective Plantings* report. Of this decline, only 900,000 acres was reported in the June Acreage report, the remaining 800,000 came in the final acreage estimate in January.

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