Crop Yields in Wet Years
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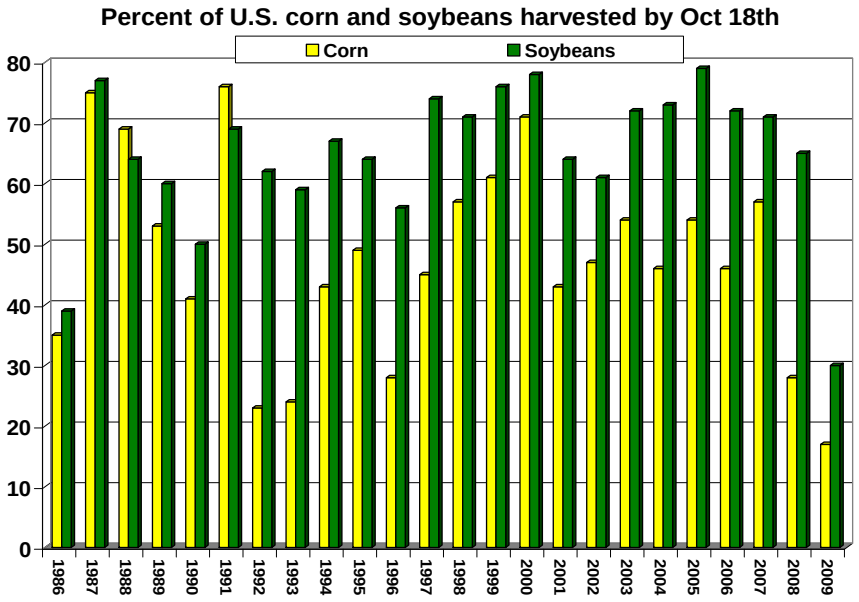
The crop growing weather in 2009 is proving to be exceptionally challenging for many corn, cotton and soybean producers. Many areas of the country experienced planting delays due to a cool and wet spring. Cool and wet weather has continued to be the watchword for much of the Midwest and has extended as far south as Arkansas and Mississippi. Consequently, the maturity rate for these crops has been delayed two to three weeks over the course of the growing season with the ongoing wet weather continuing to stall the harvest process.

Harvesting progress is moving at less than half the normal pace for all these crops. In fact, the harvest progress is at an all time low as far as current records go back. As of the most recent reporting date of October 18th, only 15% for cotton, 17% for corn and 30% for soybeans have been harvested.

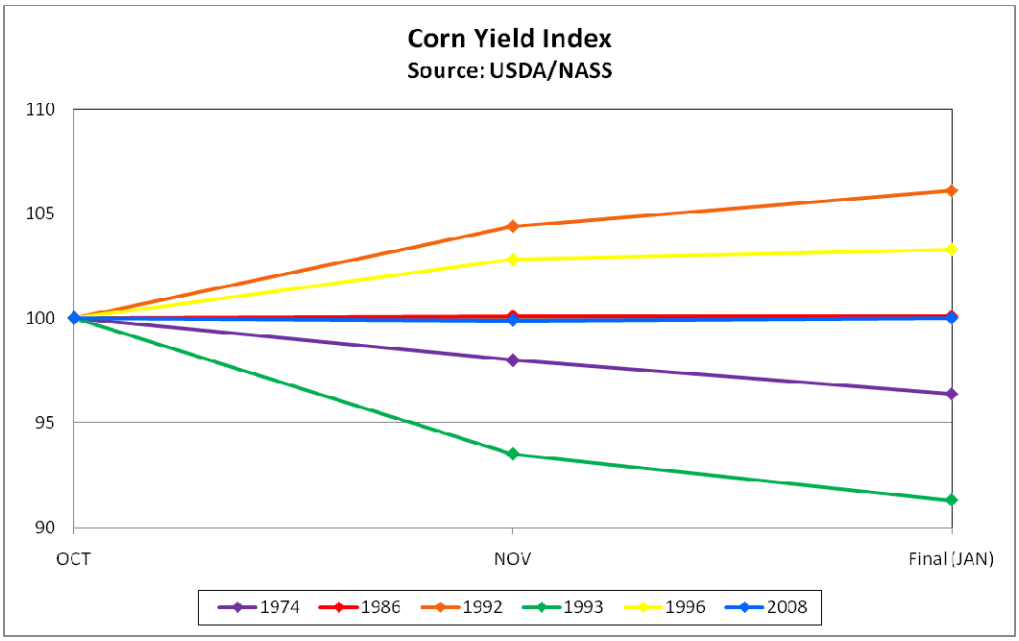


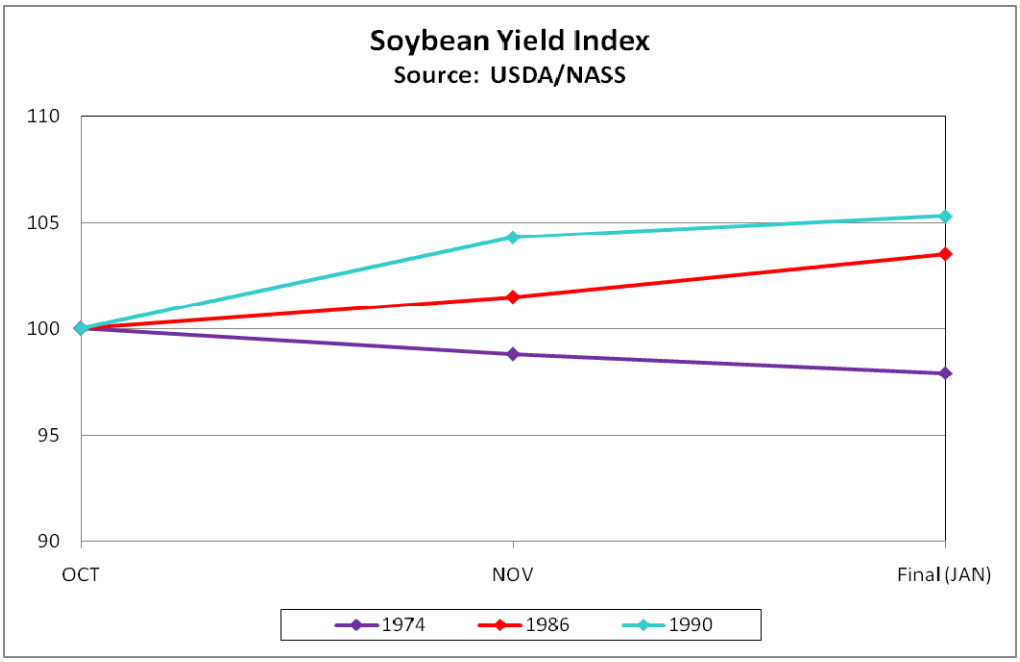
Source: Western Milling

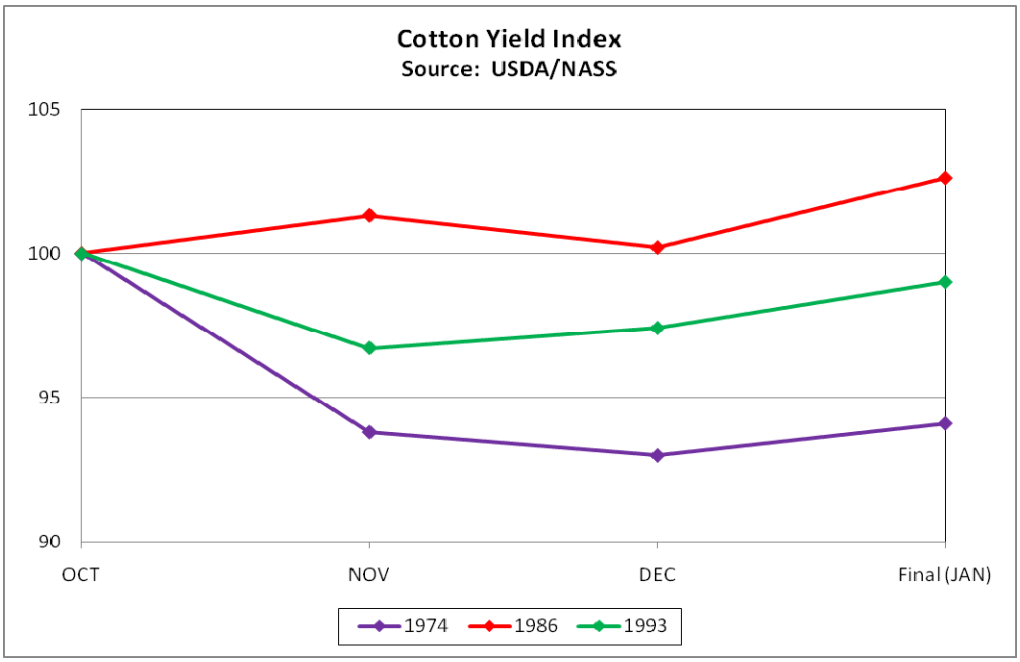
As a result of these delays, a number of concerns are growing relative to both the quantity and quality of the crops. Drying costs are going to be very high for corn producers. Intensive drying can lead to a deterioration in quality and limit the time for storage. Likewise, there have been reports of seed sprouting in both soybean pods and cotton boils.

In order to try and gage the impact of this situation I have looked at past years when harvests were similarly delayed for these crops, as indicated in the bar chart for corn and soybeans. The year 1974 was also added although this year transcends the current weather records available. 1974 is generally considered one of the most challenging crop growing years in modern agriculture for most of the same reasons experienced today with one exception. In 1974, there was a crop killing freeze in early September. This year the first freeze affecting a wide area occurred at what could be considered a normal date. Nevertheless, given the delayed maturity in many areas, particularly the Dakotas, Minnesota, Wisconsin and Michigan, there is a substantial portion of the crops that has not fully matured and these areas will likely experience some yield cutbacks as well as associated quality problems.

Predicting the yield adjustment from this point forward is largely guesswork, however. For example, if you look at the soybean chart, there are only three years in modern times where the harvest was less than 50% as of this date, 1986, 1990 and this year. If you include 1974, there was a 2.1% cutback in the national estimated soybean yield from October to the final estimate. In 1986, there was a 3.5% increase between the October yield and the final and in 1990 there was a 5.5% increase. For cotton there was a 5.9% yield reduction in 1974, a 2.6% increase in 1993 and a 1.0% decline in 1986. For corn, the years with less than 40% harvested were considered. In 1974, there was a 3.6% yield reduction and an 8.7% reduction in 1993. However, there was no change in 1986 and 2008 and a 3.3% increase in 1996 and a 6.2% rise in 1992. (See individual crop yield index charts below)







So history shows no clear path as to how yields will change from this point forward in this type of situation. Consequently, some subjective judgment seems appropriate. The advanced technology that has been applied to seed has increased the plant vigor the past decade or so. Whether the current crop will be able to withstand the impacts of diseases such as anthracnose, Dilpodia and GLS remains to be seen. However, the incessant rain and harvest delays to date have likely reduced corn yields 1 to 2 bushels per acre from the USDA October estimate of 164.2 bushels per acre. If the rain continues through the first half of November, yields could possibly slip down to as low 159 bushels per acre. But there also remains a possibility that if weather should improve dramatically in the near future that the corn yield number could also increase, as was the case in 1992 and 1996, somewhere between 5 to 10 bushels per acre. Although the probability is low at this juncture, a yield increase cannot be entirely ruled out.

Soybeans are also fighting disease problems like Sudden Death Syndrome (SDS) and white mold. These diseases have dramatically reduced production by up to 50% or more in the fields that have been infected. Likewise, fields in some areas like Mississippi are completely waterlogged to the point that harvesting may be abandoned, resulting in a total loss. However, there are also some reports of astonishingly good soybean yields in other areas. So the net effect is difficult to judge, but there will most likely be a slight reduction in U.S. soybean yields, maybe up to ½ bushel per acre from the October estimate of 42.4 bushels per acre. But again, there is a possibility that, should weather improve dramatically, yields might actually increase up one to two bushels based upon the 1986 and 1990 experience.

The cotton yield estimated will also most likely be reduced another 8 pounds or 1% from the October estimate of 807 pounds per acre. But even more devastating is the potential loss of cotton seed that can contribute up to $150 of revenue per acre. For cotton, even improved weather probably cannot reverse the damage already experienced.

If the yield losses indicated above are recorded, corn production could be reduced up to 160 million bushels, soybeans production could be reduced an additional 40 million bushels and

cotton production could be reduced about 130,000 bales. The exact numbers will not be known until the final crop yield estimates in January.

Unfortunately, there is nothing very encouraging in the outlook for weather. From the Freese-Notis Weather report on October 23rd: "A couple weeks ago in this report I stated that, considering the lateness of the crop, the wetness of the crop, and the state of the weather forecast that this was the worst conditions for harvesting that I had ever seen. Here we are two weeks later...and things clearly do not look any better." Given the amount of rainfall experienced to date and the forecast for the next week, it looks like the harvest may be delayed in many areas until the ground is frozen hard enough to support harvesting activities. This in turn would support the view that yield adjustments discussed above will be down as opposed to up.

Not much can be said about the markets other than there has been a lot of volatility and that is likely to be on going if weather problems continue. December corn futures prices have risen $1 per bushel since early September, November soybean prices are up $1.20 per bushel since the first of October and cotton prices have risen about 10 cents a pound since late August. The price increases probably outweigh the fundamental supply adjustments previously described, but there is no certainty as to where yields and production will end up. Consequently, price volatility is likely to continue until at least the November 9th USDA yield and production report and possibly until the final USDA yield and production numbers are issued in early January.