Where do we go from here?

The drought of 2012 is quickly making the record books. Comparisons to the 1930's and the



major drought of 1988 abound. Time and yields will finish the story of the 2012 crop year. Corn yield are being terminated early and bean yields are in grave danger. You might ask the question, "Where do we go from here?"

Immediate questions that pop into the farmer's mind is OK, now that this is a reality how am I going to handle this? Early harvest is a fact. Probable diminished income from crop revenues is a distinct possibility. Continued lack

of rainfall affects everything connected with the field. Crop rotations, tillage, fertility, and marketing, not to mention personal finances all are affected. The term; "making do" is going to have a whole new context for some.

Historically speaking, this is not about the yield per se, but about total bushels. We have had yield cutting droughts before, but it is the planted acres coupled with the yield that produces total production. I know that sounds like common sense, but you hear about yield cuts, but it is the total bushels here and abroad that is driving the markets. It's important to note from a marketing standpoint, that even though you drive by your crops everyday and notice their condition, the market trades on the total corn crop, both here and abroad. For a history of past US production histories, please refer to the table I formulated from USDA data from their quickstats website. The URL is http://quickstats.nass.usda.gov/

I really don't know how you use this information effectively, but it is interesting none the less.

Corn Yield and Production 1866-2012

| | | | | | | Production | |
|------|------------|-------|----------------------|-----------------------|-------------------------|------------|--|
| | | | | Yield Previous | Bushels Previous | % change | |
| | Acres | Corn | | | | | |
| Year | harvested | Yield | Total Bushels | Year Change % | Year Change % | 5 yr avg | |
| 2012 | 96,405,000 | | | | | | |
| 2011 | 83,981,000 | 147.2 | 12,358,412,000 | -3.66% | -0.71% | 0.968% | |
| 2010 | 81,446,000 | 152.8 | 12,446,865,000 | -7.23% | -4.93% | 3.958% | |
| 2009 | 79,490,000 | 164.7 | 13,091,862,000 | 7.02% | 8.27% | 11.746% | |
| 2008 | 78,570,000 | 153.9 | 12,091,648,000 | 2.12% | -7.26% | 6.866% | |
| 2007 | 86,520,000 | 150.7 | 13,037,875,000 | 1.07% | 23.80% | 24.163% | |
| 2006 | 70,638,000 | 149.1 | 10,531,123,000 | 0.81% | -5.23% | 2.295% | |

| 2005 | 75,117,000 | 147.9 | 11,112,187,000 | -7.74% | -5.87% | 10.509% |
|--------------|------------|-------|----------------|---------|---------|----------|
| 2004 | 73,631,000 | 160.3 | 11,805,581,000 | 12.73% | 17.03% | 23.226% |
| 2003 | 70,944,000 | 142.2 | 10,087,292,000 | 9.98% | 12.50% | 6.017% |
| 2002 | 69,330,000 | 129.3 | 8,966,787,000 | -6.44% | -5.64% | -6.232% |
| 2001 | 68,768,000 | 138.2 | 9,502,580,000 | 0.95% | -4.16% | -0.065% |
| 2000 | 72,440,000 | 136.9 | 9,915,051,000 | 2.32% | 5.14% | 10.097% |
| 1999 | 70,487,000 | 133.8 | 9,430,612,000 | -0.45% | -3.36% | 3.296% |
| 1998 | 72,589,000 | 134.4 | 9,758,685,000 | 6.08% | 5.99% | 15.548% |
| 1997 | 72,671,000 | 126.7 | 9,206,832,000 | -0.31% | -0.28% | 8.322% |
| 1996 | 72,644,000 | 127.1 | 9,232,557,000 | 11.98% | 24.76% | 13.311% |
| 1995 | 65,210,000 | 113.5 | 7,400,051,000 | -18.11% | -26.37% | -10.354% |
| 1994 | 72,514,000 | 138.6 | 10,050,520,000 | 37.64% | 58.58% | 29.667% |
| 1993 | 62,933,000 | 100.7 | 6,337,730,000 | -23.42% | -33.12% | -15.149% |
| 1992 | 72,077,000 | 131.5 | 9,476,698,000 | 21.09% | 26.78% | 35.379% |
| 1991 | 68,822,000 | 108.6 | 7,474,765,000 | -8.35% | -5.79% | 4.537% |
| 1990 | 66,952,000 | 118.5 | 7,934,028,000 | 1.89% | 5.34% | 8.113% |
| 1989 | 64,783,000 | 116.3 | 7,531,953,000 | 37.47% | 52.82% | 2.244% |
| 1988 | 58,250,000 | 84.6 | 4,928,681,000 | -29.38% | -30.89% | -31.696% |
| 1987 | 59,505,000 | 119.8 | 7,131,300,000 | 0.34% | -13.31% | -4.105% |
| 1986 | 68,907,000 | 119.4 | 8,225,764,000 | 1.19% | -7.32% | 10.932% |
| 1985 | 75,209,000 | 118 | 8,875,453,000 | 10.59% | 15.68% | 27.376% |
| 1984 | 71,897,000 | 106.7 | 7,672,130,000 | 31.57% | 83.80% | 9.303% |
| 1983 | 51,479,000 | 81.1 | 4,174,251,000 | -28.36% | -49.31% | -45.348% |
| 1982 | 72,719,000 | 113.2 | 8,235,101,000 | 3.95% | 1.43% | 12.936% |
| 1981 | 74,524,000 | 108.9 | 8,118,650,000 | 19.67% | 22.28% | 17.221% |
| 1980 | 72,961,000 | 91 | 6,639,396,000 | -16.89% | -16.26% | -1.874% |
| 1979 | 72,400,000 | 109.5 | 7,928,139,000 | 8.42% | 9.08% | 29.527% |
| 1978 | 71,930,000 | 101 | 7,267,927,000 | 11.23% | 11.73% | 25.278% |
| 1977 | 71,614,000 | 90.8 | 6,505,041,000 | 3.18% | 3.43% | 15.823% |
| 1976 | 71,506,000 | 88 | 6,289,169,000 | 1.85% | 7.68% | 14.603% |
| 1975 | 67,625,000 | 86.4 | 5,840,757,000 | 20.17% | 24.23% | 13.411% |
| 1974 | 65,405,000 | 71.9 | 4,701,402,000 | -21.25% | -17.09% | -8.661% |
| 1973 | 62,143,000 | 91.3 | 5,670,712,000 | -5.88% | 1.63% | 15.658% |
| 1972 | 57,513,000 | 97 | 5,579,832,000 | 10.10% | -1.18% | 17.246% |
| 1971 | 64,123,000 | 88.1 | 5,646,260,000 | 21.69% | 35.98% | 26.502% |
| 1970 | 57,358,000 | 72.4 | 4,152,243,000 | -15.72% | -11.41% | -6.764% |
| 1969 | 54,574,000 | 85.9 | 4,687,057,000 | 8.05% | 5.34% | 11.254% |
| 1968 | 55,980,000 | 79.5 | 4,449,542,000 | -0.75% | -8.45% | 7.819% |
| 1967 | 60,694,000 | 80.1 | 4,860,372,000 | 9.58% | 16.62% | 25.395% |
| 1966 | 57,002,000 | 73.1 | 4,167,608,000 | -1.35% | 1.58% | 10.779% |
| 1965 | 55,392,000 | 74.1 | 4,102,867,000 | 17.81% | 17.75% | 10.206% |
| | | | | | | |
| 1964 | 55,369,000 | 62.9 | 3,484,253,000 | -7.36% | -13.31% | -8.091% |
| 1964 1963 | | | | | | |

| 1962 | 55,726,000 | 64.7 | 3,606,311,000 | 3.69% | 0.24% | 1.696% |
|------|------------|------|---------------|---------|---------|----------|
| 1961 | 57,634,000 | 62.4 | 3,597,803,000 | 14.08% | -7.91% | 4.536% |
| 1960 | 71,422,000 | 54.7 | 3,906,949,000 | 3.01% | 2.15% | 20.775% |
| 1959 | 72,091,000 | 53.1 | 3,824,598,000 | 0.57% | 13.96% | 26.998% |
| 1958 | 63,549,000 | 52.8 | 3,356,205,000 | 9.32% | 10.21% | 15.070% |
| 1957 | 63,065,000 | 48.3 | 3,045,355,000 | 1.90% | -0.97% | 4.876% |
| 1956 | 64,877,000 | 47.4 | 3,075,336,000 | 12.86% | 7.04% | 9.268% |
| 1955 | 68,462,000 | 42 | 2,872,959,000 | 6.60% | 6.09% | 2.874% |
| 1954 | 68,668,000 | 39.4 | 2,707,913,000 | -3.19% | -6.03% | -4.663% |
| 1953 | 70,738,000 | 40.7 | 2,881,801,000 | -2.63% | -3.32% | -1.491% |
| 1952 | 71,353,000 | 41.8 | 2,980,793,000 | 13.28% | 13.38% | 8.356% |
| 1951 | 71,191,000 | 36.9 | 2,628,937,000 | -3.40% | -4.89% | -6.388% |
| 1950 | 72,398,000 | 38.2 | 2,764,071,000 | 0.00% | -6.18% | -0.251% |
| 1949 | 77,106,000 | 38.2 | 2,946,206,000 | -11.16% | -10.91% | 7.443% |
| 1948 | 76,840,000 | 43 | 3,307,038,000 | 50.35% | 56.86% | 26.494% |
| 1947 | 73,802,000 | 28.6 | 2,108,320,000 | -23.12% | -27.70% | -23.420% |
| 1946 | 78,410,000 | 37.2 | 2,916,089,000 | 12.39% | 13.14% | 9.926% |
| 1945 | 77,928,000 | 33.1 | 2,577,449,000 | 0.30% | -8.00% | -0.047% |
| 1944 | 85,002,000 | 33 | 2,801,612,000 | 1.23% | 4.99% | 12.666% |
| 1943 | 81,906,000 | 32.6 | 2,668,490,000 | -7.91% | -4.76% | 10.590% |
| 1942 | 79,213,000 | 35.4 | 2,801,819,000 | 13.46% | 16.04% | 20.639% |
| 1941 | 77,404,000 | 31.2 | 2,414,445,000 | 7.96% | 9.41% | 15.450% |
| 1940 | 76,443,000 | 28.9 | 2,206,882,000 | -3.34% | -5.75% | 7.641% |
| 1939 | 78,307,000 | 29.9 | 2,341,602,000 | 7.55% | 1.80% | 29.280% |
| 1938 | 82,788,000 | 27.8 | 2,300,095,000 | -3.81% | -2.10% | 29.789% |
| 1937 | 81,222,000 | 28.9 | 2,349,425,000 | 55.38% | 86.66% | 29.229% |
| 1936 | 67,833,000 | 18.6 | 1,258,673,000 | -23.14% | -37.11% | -37.450% |
| 1935 | 82,551,000 | 24.2 | 2,001,367,000 | 29.41% | 74.53% | 1.930% |
| 1934 | 61,245,000 | 18.7 | 1,146,734,000 | -17.98% | -45.52% | -46.938% |
| 1933 | 92,130,000 | 22.8 | 2,104,725,000 | -13.96% | -18.38% | -3.998% |
| 1932 | 97,213,000 | 26.5 | 2,578,685,000 | 8.16% | 15.64% | 21.620% |
| 1931 | 91,131,000 | 24.5 | 2,229,903,000 | 19.51% | 26.89% | 6.067% |
| 1930 | 85,525,000 | 20.5 | 1,757,297,000 | -20.23% | -17.69% | -21.103% |
| 1929 | 83,194,000 | 25.7 | 2,135,038,000 | -2.28% | -5.57% | -1.718% |
| 1928 | 85,832,000 | 26.3 | 2,260,990,000 | -0.38% | 1.93% | 2.490% |
| 1927 | 83,915,000 | 26.4 | 2,218,189,000 | 2.72% | 3.64% | 0.446% |
| 1926 | 83,275,000 | 25.7 | 2,140,207,000 | -6.20% | -10.16% | -6.609% |
| 1925 | 86,825,000 | 27.4 | 2,382,288,000 | 23.98% | 28.07% | 1.192% |
| 1924 | 84,119,000 | 22.1 | 1,860,112,000 | -20.50% | -23.44% | -24.095% |
| 1923 | 87,493,000 | 27.8 | 2,429,551,000 | 5.70% | 8.97% | -0.953% |
| 1922 | 84,858,000 | 26.3 | 2,229,496,000 | -5.40% | -12.81% | -13.875% |
| 1921 | 91,939,000 | 27.8 | 2,556,924,000 | -7.02% | -5.13% | -0.211% |
| 1920 | 90,149,000 | 29.9 | 2,695,085,000 | 11.57% | 15.08% | 4.093% |
| | | | | | | |

| 1919 | 87,487,000 | 26.8 | 2,341,870,000 | 12.13% | -4.07% | -10.803% |
|------|-------------|------|---------------|---------|---------|----------|
| 1918 | 102,195,000 | 23.9 | 2,441,249,000 | -8.78% | -16.06% | -5.807% |
| 1917 | 110,893,000 | 26.2 | 2,908,242,000 | 8.71% | 19.92% | 11.869% |
| 1916 | 100,561,000 | 24.1 | 2,425,206,000 | -14.23% | -14.27% | -7.065% |
| 1915 | 100,623,000 | 28.1 | 2,829,044,000 | 8.91% | 12.10% | 8.214% |
| 1914 | 97,796,000 | 25.8 | 2,523,750,000 | 13.66% | 11.05% | -4.105% |
| 1913 | 100,206,000 | 22.7 | 2,272,540,000 | -21.99% | -22.91% | -15.539% |
| 1912 | 101,451,000 | 29.1 | 2,947,842,000 | 19.26% | 19.12% | 12.349% |
| 1911 | 101,393,000 | 24.4 | 2,474,635,000 | -12.54% | -13.26% | -9.536% |
| 1910 | 102,267,000 | 27.9 | 2,852,794,000 | 6.90% | 9.25% | 3.521% |
| 1909 | 100,200,000 | 26.1 | 2,611,157,000 | -2.97% | 1.73% | -5.763% |
| 1908 | 95,285,000 | 26.9 | 2,566,742,000 | -1.10% | -1.80% | -7.019% |
| 1907 | 96,094,000 | 27.2 | 2,613,797,000 | -14.20% | -13.82% | -6.401% |
| 1906 | 95,624,000 | 31.7 | 3,032,910,000 | 2.59% | 2.67% | 19.920% |
| 1905 | 95,746,000 | 30.9 | 2,954,148,000 | 9.57% | 9.96% | 19.568% |
| 1904 | 95,228,000 | 28.2 | 2,686,624,000 | 4.83% | 6.82% | 9.101% |
| 1903 | 93,555,000 | 26.9 | 2,515,093,000 | -5.61% | -9.33% | 3.512% |
| 1902 | 97,177,000 | 28.5 | 2,773,954,000 | 56.59% | 61.68% | 18.926% |
| 1901 | 94,422,000 | 18.2 | 1,715,752,000 | -35.23% | -35.55% | -32.011% |
| 1900 | 94,852,000 | 28.1 | 2,661,978,000 | 0.36% | 0.61% | 6.560% |
| 1899 | 94,591,000 | 28 | 2,645,796,000 | 4.48% | 12.52% | 15.438% |
| 1898 | 87,784,000 | 26.8 | 2,351,323,000 | 5.51% | 2.78% | 6.792% |
| 1897 | 89,965,000 | 25.4 | 2,287,628,000 | -15.33% | -14.35% | 7.718% |
| 1896 | 89,074,000 | 30 | 2,671,048,000 | 7.14% | 5.38% | 29.872% |
| 1895 | 90,479,000 | 28 | 2,534,762,000 | 38.61% | 56.95% | 34.841% |
| 1894 | 80,069,000 | 20.2 | 1,615,016,000 | -15.13% | -15.02% | -19.877% |
| 1893 | 79,832,000 | 23.8 | 1,900,401,000 | -3.64% | 0.16% | -8.885% |
| 1892 | 76,914,000 | 24.7 | 1,897,412,000 | -16.55% | -18.77% | -6.400% |
| 1891 | 78,855,000 | 29.6 | 2,335,804,000 | 33.94% | 41.53% | 21.876% |
| 1890 | 74,785,000 | 22.1 | 1,650,446,000 | -25.08% | -28.06% | -17.395% |
| 1889 | 77,656,000 | 29.5 | 2,294,289,000 | 1.37% | 1.94% | 18.954% |
| 1888 | 77,474,000 | 29.1 | 2,250,632,000 | 32.88% | 40.27% | 24.412% |
| 1887 | 73,296,000 | 21.9 | 1,604,549,000 | -9.13% | -10.00% | -12.757% |
| 1886 | 73,911,000 | 24.1 | 1,782,767,000 | -15.73% | -13.37% | 2.956% |
| 1885 | 71,854,000 | 28.6 | 2,057,807,000 | 1.06% | 5.65% | 23.864% |
| 1884 | 68,834,000 | 28.3 | 1,947,838,000 | 16.94% | 17.90% | 20.076% |
| 1883 | 68,168,000 | 24.2 | 1,652,148,000 | -8.68% | -5.88% | 2.960% |
| 1882 | 66,157,000 | 26.5 | 1,755,272,000 | 33.84% | 41.01% | 12.751% |
| 1881 | 63,026,000 | 19.8 | 1,244,803,000 | -27.47% | -27.06% | -22.367% |
| 1880 | 62,545,000 | 27.3 | 1,706,673,000 | -3.19% | -2.59% | 9.954% |
| 1879 | 62,229,000 | 28.2 | 1,751,984,000 | 7.63% | 11.98% | 23.944% |
| 1878 | 59,659,000 | 26.2 | 1,564,537,000 | 1.55% | 3.21% | 20.138% |
| 1877 | 58,799,000 | 25.8 | 1,515,862,000 | -3.37% | 2.55% | 20.787% |
| | | | | | | |

| 1876 | 55,277,000 | 26.7 | 1,478,173,000 | -3.61% | 1.92% | 24.458% |
|------|------------|------|---------------|---------|---------|---------|
| 1875 | 52,446,000 | 27.7 | 1,450,276,000 | 24.77% | 36.98% | 29.190% |
| 1874 | 47,640,000 | 22.2 | 1,058,778,000 | -3.06% | 5.00% | -0.794% |
| 1873 | 44,084,000 | 22.9 | 1,008,326,000 | -22.11% | -21.19% | -3.924% |
| 1872 | 43,584,000 | 29.4 | 1,279,369,000 | 8.09% | 12.06% | 34.329% |
| 1871 | 42,002,000 | 27.2 | 1,141,715,000 | -7.17% | 1.51% | 31.196% |
| 1870 | 38,388,000 | 29.3 | 1,124,775,000 | 34.40% | 43.82% | |
| 1869 | 35,833,000 | 21.8 | 782,084,000 | -16.79% | -14.95% | |
| 1868 | 35,116,000 | 26.2 | 919,590,000 | 6.07% | 15.83% | |
| 1867 | 32,116,000 | 24.7 | 793,905,000 | 1.65% | 8.63% | |
| 1866 | 30,017,000 | 24.3 | 730,814,000 | | | |

Keep in mind we're not the only ones raising corn. Even though this drought is widespread, how widespread is it? I'm not telling you this to minimize the extent of your damages, but to give you some perspective on the total world crop and demand. One question to ask yourself is this: "Who is going to use \$8.00 + corn?" To meter out what corn we have, demand is going to have to be destroyed. The price of corn for use by feeders, ethanol producers, and other product manufacturers is being raised right now. They look for substitutes to lessen their costs. This affects demand and is the process how the market reaches equilibrium. For instance: Livestock feeders which use the bulk of the corn crop, look to other products such as wheat to substitute in their feed rations to cut costs. Livestock producers who don't have a government sponsored insurance program like crop producers, are definitely being hardest hit by the drought. You cannot keep printing new contract highs every day with no consequences. Government interference in the markets has happened before and will probably happen again.



The chart above is a monthly Dec corn chart from 2002 to present.

Getting back to the drought effects on grain producers, any fall field operations are going to have to be thought out carefully. The good news is that ground compaction will be minimal. Fertilizer applications, in many cases, will be done on removal. This means we will look at yield we have removed from the soil, then apply fertilizer accordingly. This reduces costs and doesn't waste expensive fertilizer. Deep tillage on a field wide basis is not necessary this year. Compacted areas normally attributed to large equipment on damp soils did not occur this year. Wet holes out in the fields did not occur this year. Deep tillage in conditions such as these not only waste what moisture is left in the soil, but is difficult and hard on equipment. Moisture lubricates the soil. The best way I can describe the effect on equipment is to take it to the extreme. Imagine what the effect on equipment would be plowing up a gravel road. No moisture and hard, abrasive rock would shorten life of wear areas on the equipment. This is what will happen in the fields this fall if we don't get rain. The effect of drought is not all about yield. The effects are far reaching and can last for more than one crop year. Fertilizer application, especially ammonia application may have to be delayed until there is enough moisture in the soil for the chemical processes and interactions to work. We're not putting down expensive fertilizer using methods just because we have done so in the past. We are going to use the most effective applications that put your investment at the least risk.

We're in the process right now of adjusting equipment in many ways to handle this crop. Tolerances used in the past will not work this year. This corn crop is going to be hard to keep in the combine. What I mean by that is that the dry conditions have not only made the ear size smaller, but the kernels that are on the cob are harder to remove due to their length which is shorter. The cob is also more supple or "twisty". This combination of factors will probably lead to more kernel damage which is the last thing we need this year due to the corn susceptibility of aflatoxins entering the damaged pericarp or outside layer of the kernel. We will do our best to cut crop losses and maintain quality.

The physical size of soybeans will be smaller this year. Pods are going to be incompletely filled and harder to thresh effectively. Fan speeds used to clean a normal crop will have to be toned down to keep from blowing the beans out of the back end of the combine. I suspect yield monitors will be very inaccurate this year due to low volumes of crop running through the combine. Modern machinery is designed for maximum production. Everything works better when it is operating full. It is going to be impossible to keep these machines full



this year due to a smaller crop size and uneven yield within the field itself. Yield maps are going to show extreme variability this year.

This is probably going to be the last newsletter prior to harvest. About all that can be said about this devastating drought has been said and we'll just have to get out there to see what we have bushel and quality wise. No matter what the outcome, we will strive to protect your investment and return per acre. As we start into harvest, I will be in personal contact updating you to harvest yields and elevator issues. If you have any further questions, I'm as close as your phone.