

## **RF Posson & Company, CTA**

**Also presented by Ag Financial Strategies**

### **Annual Corn Report 12/14/06 THE Bull Takes A Bow.**

#### 2006 Review

- The long term minimum objective for corn has been \$4.00 basis futures. The high of 2006 was \$3.93 for our spot chart.
- The forecast for drought for 2006-2008 to cause lower corn production did not come to fruition and remains intact.
- The corn crop condition model allowed for a decline for 2006 but with lower probability compared to 2005 forecast and allowed for an improvement. Crop condition improved for 2006.
- The long term forecast from 1993 called for a major bull market for wheat during years 2004-2008 with minimum target of \$5.00 plus a crop production impact. This forecast was proven correct during 2006 with wheat over \$5.00 and a production reduction.
- The forecast for the long term trend of corn as higher from December 2005 and to perhaps last into 2008 was correct for 2006 in that trend was higher for price.
- The long term forecast for a recovery for the Posson Disaster Price Index was correct and the index for 2006 rallied from a low of -65 to over 100.

#### 2007 Forecast

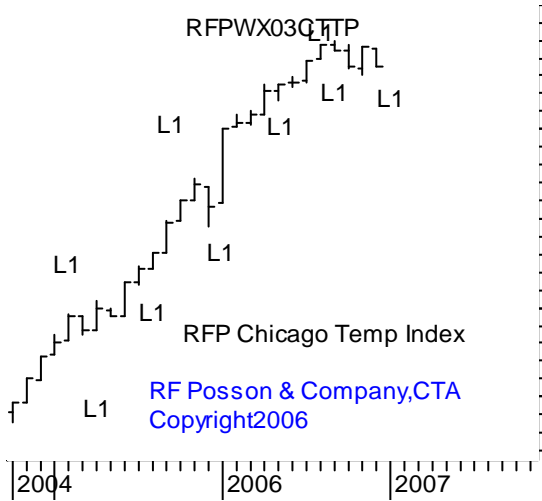
- Corn crop condition model favors slightly higher probability for lower condition for 2007 than 2008. And high probability for a crop condition decline large enough to impact markets and for 2007 or 2008.
- Weather and production of corn forecast remains with high probability for a crop reduction related to weather 2007 or 2008. 2008 as the deadline year for corn and wheat and one year later for the soy sector.
- Price forecast allows for 2007 to be a bear market year but with 2008 as a bull market year with potential for record high price. Same forecast allows and prefers for 2007 to be a bull market year and trend to extend into 2008 with potential for \$6.80 corn. Soybean potential \$8.00 to a new record high with deadline as 2009. Wheat potential is \$5.90 to a new record high.

#### **Weather**

The Benner Drought cycle is said to forecast two events for the latter half of this decade. Although 2006 was with drought from Texas to the Canadian border the drought did not spread or migrate east to impact the corn-belt in terms of corn production. I assume we have not seen either of the two droughts due now into end of decade and I consider the idea that it will take only one to create a major bull market. The Benner forecast remains intact according to my sources.

El Nino possibilities offer 2007 as trending either way as for an event or no event and as to crop implications. My research suggests that although some researchers suggest El Nino creates good crops of corn from the corn-belt that El Nino events do not necessarily create bear markets. A contrarian could create an opinion that such events create an important bottom for price. I understand that there is some statistical evidence that if El

Nino terminates before the growing season that drought can occur despite the “watering” of crop land by the El Nino event.



Proprietary weather research suggests chance that 2005 was a dry year for the core corn-belt, wet for 2006 and can be dry for 2007. This research which is mostly cyclical based does allow for a one year delay for dry conditions and for 2008. Research still points to 80%+ probability for a precipitation reduction now and through 2008. Same research in terms of my Chicago Precipitation Index calls for a cyclical end to the 2006 wet trend. Temperature research offers a trend for the corn-belt that has been catching

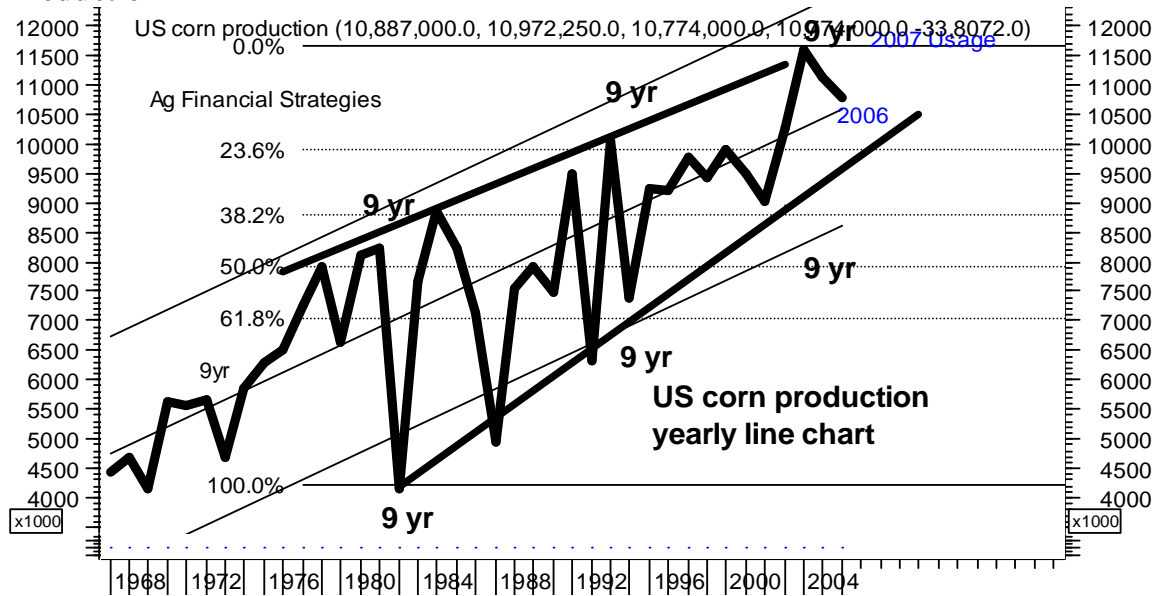
up with the global warming trend. The corn-belt had been lagging the US warmer trend for some years now and more so during the summer growing period. A warming trend such as this could be a sign that the corn-belt is preparing for a hot and dry summer.

### Global Warming

A 1,000 year cycle of warmer than normal temperature peaked in the years of 1,000 and is due to peak this century. Research shows that this cycle can run a wide range of time to peak or bottom or that there is a tendency toward after shocks or secondary tops in that important temperature peaks can be found as late as years of 1300. The trend from the top was first for not so above temperature and then cooler than normal temperature climaxing with the Mini Ice Age of the 1600s. Trend has been warmer since then with corrections during the 1700s and 1800s followed by acceleration from shorter term cyclical turns during the 1930s, 1980s and 1990s.

Use of the shorter cycles suggests timing of the 1,000 cyclical warm trend as not due for a top (hottest) until the 2030s the earliest. With this cyclical trend there are phases of wet versus dry conditions as well as corrections of short term periods of cooler temperature. This decade could be a transition from a wet period (1950s to 2000s) to a dry or less wet period into the 2030s. Research such as this does correlate with bullish cyclical price possibilities into the 2030s. Although I must consider the possibility for global warming to interfere with the Benner cycle and proprietary studies I must follow the higher probability for a negative crop impact for 2007 and or 2008. In addition on going cyclical price research offers a 170 yr price cycle that may relate to the same cycle found in climate research and could relate to an extreme reduction in production of grain some where on the planet. And this cycle structure is due for this decade.

## Production



The production forecast for US corn remains bearish production and bullish price in that statistics in relation to cyclical structure suggest 80%+ probability that production will decline by large enough amount to be referred to as a problem year. A deadline of 2008 is also used. Current trend has been lower since the record high production year of 2004 and this trend offers evidence the forecast is correct.

The production model does allow for 2007 production to be higher than 2006 production in relation to the 3 yr cycle which can be found in production and weather data 80% of the time versus 100% of the time for price. If production was to be higher for 2007 the probability for lower 2008 production would be extremely high. In addition to model using production pattern, cycles and weather, the model incorporates a rotation cycle and allows for bias in terms of price influencing future production. In late 2005 the price of corn was extremely cheap and price did not rally fast enough by planting time to entice farmer to grow enough acres to meet even old economic requirement. This year price has rallied to a price level to buy at least some of the desired acres and the rotation cycle should have added acres as well. None the less until the 2007 crop is harvested or at least planted there is more potential of not buying 8 to 10 million acres than not in that that many acres may not be available. In addition the soy sector will compete for acres despite large supply of soybeans at this time. Clearly the free market learned from its mistake of 2005-2006 and has made its best effort to do the "right thing" for 2006-2007 and compete for additional corn acres to better meet demand requirement.

During 2005 a crop condition model called for higher probability for a decline in crop condition for 2006 than 2005. With a decline in condition during 2005 to a level that was a warning of a crop problem the odds switched from 2006 to 2005. Which in turn reduced odds for 2006 to be a low crop condition year and although there was a weather/crop scare during 2006 the year finished with good condition rating and a large crop of corn. Probability for a crop problem now increases for 2007 and slightly higher than for 2008 with both years as referred to as high probability.

- Usage of corn for 2007 is projected to be above production of 2006.

## Economy and Demand

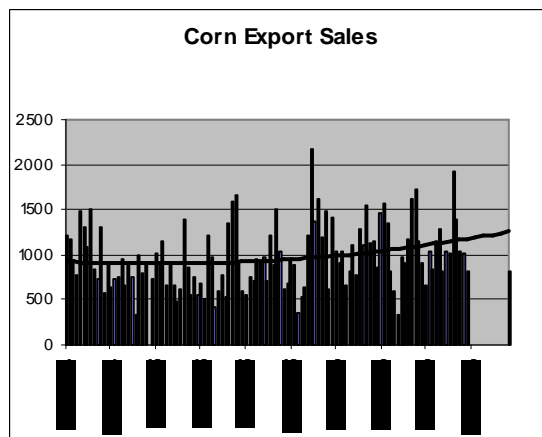
### Macro

The ISM Procurement Managers Index recently declined to 50 suggesting a slower economy and increasing risk of recession. Cycle Series Analysis can be applied to data other than price. Research suggests the current decline of the ISM PMI is the down side of the standard 3 yr Business cycle and should terminate no later than second quarter of 2007. Forecast is for higher trend of the index for 2007 which should reflect an expanding economy. Since the 1950s the index has correlated with recessions and the primary recession per decade tends to occur early in the decade. A shadow or secondary recession occurs about mid decade and may not meet the definition of a recession by economists.

With China maintaining aggressive gross domestic product rating and net growth of China and India, I assume the global and US economies to support the ISM PMI forecast. Which in turn offers support to maintain aggressive demand (and burn rate) of commodities. This should support demand for US grain and more so with a stable to weak US dollar.

### Micro

The Big Bang corn forecast for this decade has stated that ideally corn would reach a new record high and should at least reach \$4 as a minimum. The opinion has been the same for 10 years now with past 5 years as with opinion that demand would not take price to \$4 or higher by itself. It seems past cyclical bull markets of this magnitude have climaxed from a weather crop event more than man made demand based economics. With price having been within a few cents of the minimum futures based target it is obvious the demand input

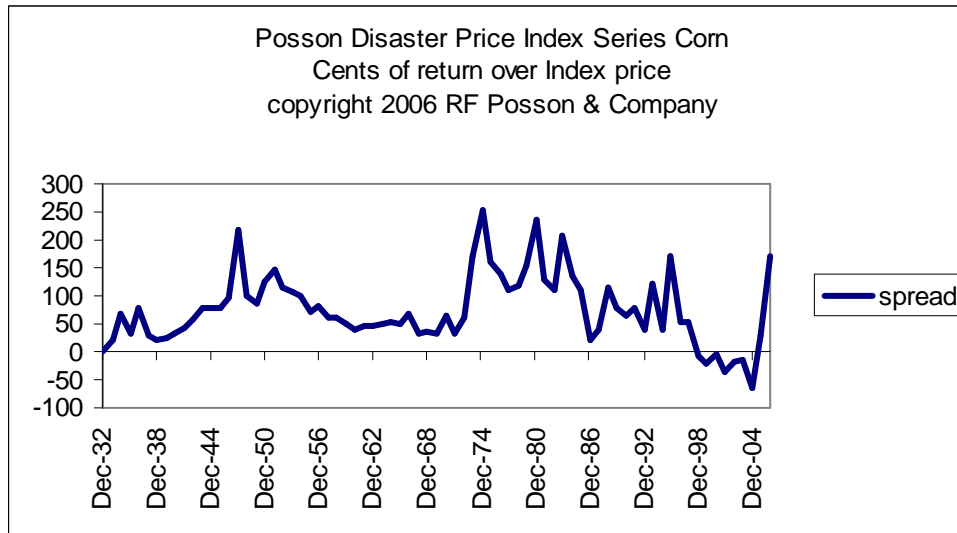


of the cyclical forecast was unappreciative of the degree innovation of man. None the less any long term technical bullish forecast includes a forecast for increased demand.

The free market law of Cause and Effect assists with explanation of the more than expected dynamic of demand. A large increase in the price of crude oil created a cause to increase alternative energy production. With the investment banker wading in cash and in search of the next industry of opportunity and directly related to the 2000-2002 stock market fall out there was and still is plenty of money and professional business consultation to match the demand for production. End result was (and still is) a massive surge in ethanol plant construction and similar to the land and gold rush of the 1800s. Such business activity created an effect of fast paced growth of usage of corn which in

turn creates a cause to raise price of corn in order to entice grower to produce more corn and to reduce demand from the least efficient user. The year of 2006 should go in the history books as meeting this script.

The export forecast has been for higher export sales for 2006 into 2008. A recent review of the trend forecast for weekly corn sales showed net sales trend forecast have been intact for over a year now. Meaning as hypothetical sales have been replaced with actual sales the trend line shown on the chart shifts up or down by an insignificant amount and maintained the up trend. I will remain with the bullish export forecast in that the export buyer must compete with US ethanol and other domestic demand of corn.



### Posson Disaster Price Index

The Posson Disaster Price Index is a long term study that was created in recent years and as alternative to studies that adjust commodity prices for inflation. The corn version of this index uses the lowest price of the 1930s and adjusts for inflation with a cyclical economic bias. For the corn index a measure of -65 during 2005 seemed like a gross failure of economics as it was 8% below the equivalent price of the 1930s Great Depression. And 65 cents per bushel below the 2005 inflated price. With the use of the cyclical adjustment as applied to 2005 I now can use an inflated disaster price of \$2.00 which in my way of thinking incorporates the innovation of demand and production of corn. Without this adjustment the disaster low price is \$2.70 and rising at ever faster pace. The economic clock has been reset for today's economy.

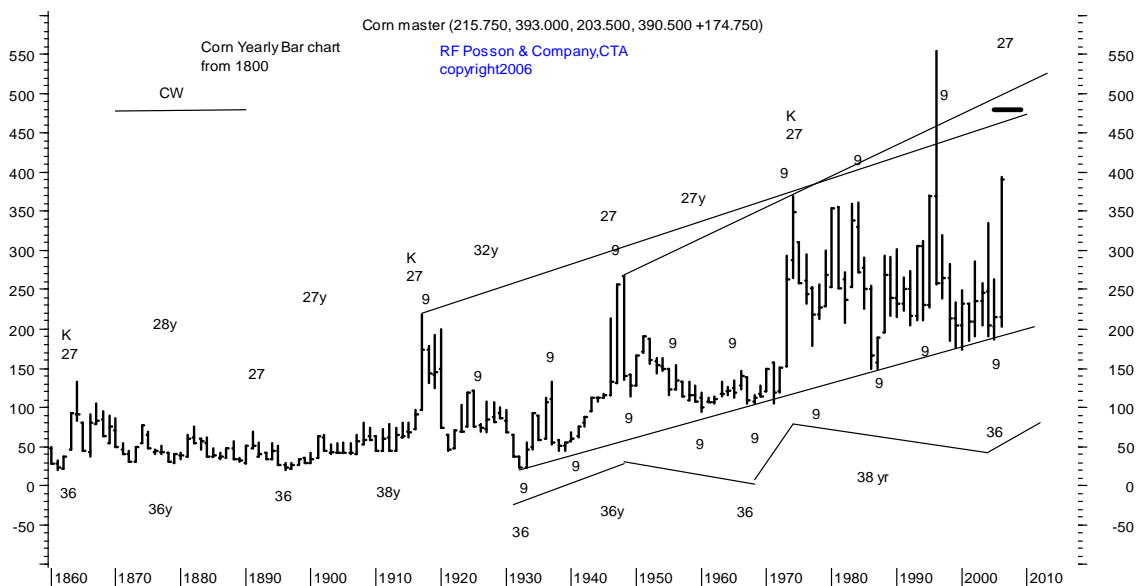
A chart of the corn index now shows immediate response to a grossly under valued market with record setting recovery and visual evidence that history repeats itself and there is cyclical structure to pricing. The characteristic of volatility of the index in relation to the fundamental and technical developments of 2006 suggests corn has seen the greatest demand innovation of the past 2000 years. I suspect the trend factor of this index to remain intact in terms of not returning to zero or less any time next couple of decades. And therefore just as I have for the past 5 years assumed a reckless long term buy of corn should be made at \$2.00 or lower over the past 10 years can now be adjusted

higher to a reckless buy at \$2.50. Meaning that I doubt we will see corn under \$2.50 any time next several years.

## Price

### This cyclical bull is short of time but no slouch.

The 2006 annual forecast (2006) discussed the 36 yr time cycle as having bottomed late 2006 and should trend higher into a 27 yr cycle top due no later than 2008. A study of trends from 36 yr bottoms to 27 yr tops suggests trends lasting 4 to 30 years. With this bull market's time span it can be seen it will rank with the shortest of bull markets. The shortest does not mean a lack of volatility in that the shortest bull market was during the Civil War (US-1860s) and with price appreciation in terms of today's dollar of \$10.84 per bushel. As analog 2008 would be the year for \$10.84.



The yearly bar chart shown above is labeled with the 36:27 cyclical trends including some of the fractal 9 yr trends. With the 2006 bull-run it is now visible that the 9 yr trend peaked in 1996, bottomed with the 36 yr bottom of 2005 and now trends higher into a climax due no later than 2008. To calculate the timeband for the 27 yr bull market top one must have an understanding of the cyclical fractals within the Cycle Series Analysis (CSA) model.

A technical study in relation to the CSA forecast has for some years forecast a price minimum target of \$4 spot futures. My version of spot price shows a high for 2006 at \$3.93. If there were to be a down trend now and lasting into end of decade the 2006 performance would be disappointing but within reach of the minimum target. A better failed top however would be a spot price over \$4.50 and if one must throw analytical darts I prefer \$4.76. The ideal forecast however has always called for a new record high.

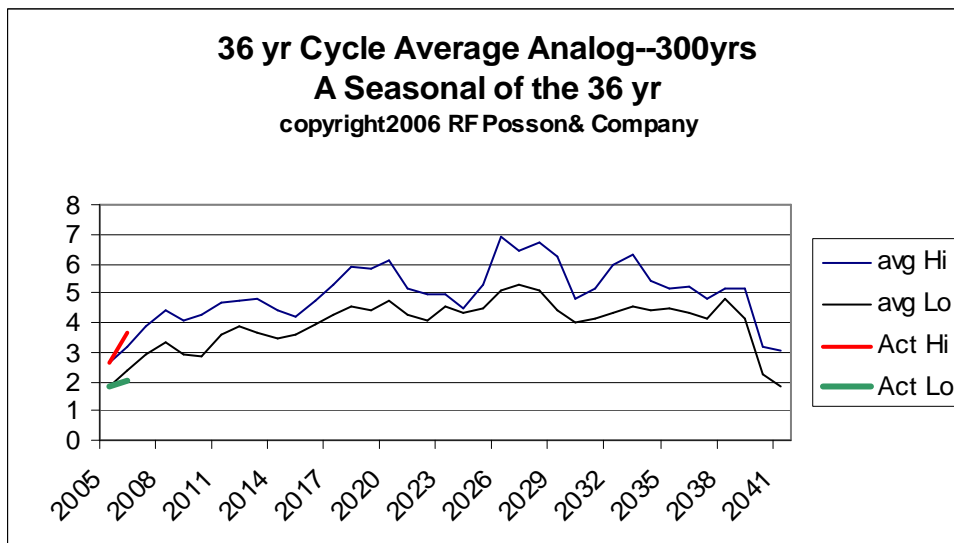
In light of today's balance sheet and "what if" it should be more feasible for the trader or analyst to allow for a new record high. During 2006 one economist of a prestigious

university suggested that dependent upon energy price that the ethanol industry could pay as high as \$7.00 for corn and survive. The “awareness” phase of the cycle is in full force now that even economists acknowledge the possibilities.

A Fusion model which includes as input CSA Price forecast, CSA as applied to fundamentals such as production and standard fundamental analysis not only offers the discussed minimum price targets but forecast one of the better of demand trend in recent years plus a crop impact to lower and perhaps dramatically lower production. So although price has been near the lowest minimum price requirement the Fusion CSA is lacking important components for a top. The conclusion is that this bull has additional up side potential.

The 3 yr business cycle may be fickle.

A component of the CSA model is the 3 yr cycle which is normally the more important cycle and can make or break the business year. Its volatility has been with 20% to over 200% price increase and 20% to 90% price decline for many commodities and stocks. The greater of extreme performance was normally related to the longer cycles. The 3 yr cycle ideally peaked in July 2006 and with a higher price as of November 2006 we have an automatic forecast for higher price into the next 3 yr cycle top which should not occur earlier than 2008. So we have a forecast that the Big Bang is underway and there will likely be a crop problem along side record demand. And now for the catch and that is the chance for the 3 yr to have peaked with the November top. This would be a late top but allowed. With chance the 2007 corn crop could be another “good” crop this cyclical set up would allow for 2007 to be a down year with 2008 as an up year. So 2008 would be like the 1988 bull market when there was a drought and a bull market but the bull market finished the same year.



### A 36 Year Cycle Analog

A seasonal or analog of the 36 yr cycle can be created by taking the average performance of seven 36 yr cycles and applying this performance to the lowest price of 2005 which was a 36 yr cycle bottom. It can be seen that 2006 was the first year of the cyclical trend

and price (Act Hi-Lo) did follow the analog forecast as for an up year and to be higher than the high of the previous year. The forecast is for higher price for the next 20 to 30 years which fits with the CSA forecast in that following a bear market which will follow the top to be made by 2008 that the trend should be higher into the next 27 yr top and a Kondratieff cycle top ideally due in the 2030s. This trend characteristic may relate to the global warming trend that is not due to peak earlier than the 2030s. It could also relate to a trend of global economic expansion.

- Technicians should consider that on average the 36 yr cycle prefers “V” bottoms and “head and shoulder” tops. Fundamental analysts should consider that a “V” bottom increases risk that standard economic or fundamental analysis may not react fast enough to the change in fundamental input. If price is to make a “V” bottom then price recovers from a long term bear market with increased volatility suggesting a fast paced reversal of fundamentals and related economics.
- Deviation study suggests corn should not retrace to under \$2.50 for years to come while a price as high as \$10.84 would not be referred to as a new statistic of price.
- A correlation study offers the 36 yr cycle of the late 1700s and in today’s dollars for a 2006 price high of \$3.48 per bushel. December 2006 futures traded to \$3.70s and settled at \$3.58.
- If the analog is correct then this decade’s Big Bang bull market was not the end of a bull move but the initiation ceremony of a new economy that remains cyclical. Just as with the Big Bang of the Universe created momentum lasting millions of years the Big Bang for corn is more than about price but of industry structural change with momentum to last next 30 years. With the need for energy security there is motive.

### **Forecast**

The September through November price explosion of 2006 should go in the analytical history books as the “thief in the night” as for aspiring long term investors and risk managers. I suspect many wanted to buy and missed the move or more of the move than desired. Current price seems too high to blindly purchase long term and forget about it. And yet there is still greater probability of higher price than not and more potential for the bulls than the bears in terms of price change. Consumers for the most part did understand the bullish possibilities and were protected for last quarter of 2006 but most are not protected for 2007. So there is plenty of un-priced consumption on the table which with a weather market can add bullish volatility to the equation. All 27 yr cycle tops finished with degree of “panic”.

**The preferred forecast is for higher spot futures price to \$4.30-4.50 early 2007 with a weather scare rally mid year to as high as \$4.70s. From that point forward one must consider the impact of a large crop of corn versus the impact of a small crop versus demand into 2008. Add a drought impact and the target range becomes \$5.00 before end of 2007 and up to \$6.80 for early 2008. If no drought and crop impact for 2007 it seems as though demand would not carry price over the \$4.70s.**

If by chance 2007 were to finish as a down year we should not rule out the deadline year of 2008 to create a new record high price.

#### Wheat

I have waited since 1993 to see wheat meet its time obligation for a bull market for years 2004 through 2008 and for the minimum price target of \$5.00. The year of 2006 was a year of crop reduction, price over \$5.00 even for the weak Chicago futures market and within the 2004-2008 timeband. History has repeated itself and in today's dollars with today's economy. **The forecast for this decade was correct and made 10 years in advance.**

There is chance wheat is now within a bear market into next decade but with the corn Big Bang possibility, global demand and global weather risk I would rather not time the top at this time. Instead I will consider chance for a bull market 2007 and or 2008 and some what along side corn and **with potential to trade to \$5.90 to \$8.50**. Models favor chance for a bear market into an early harvest low for first crop 2007 wheat with potential for support as \$4.50 spot Chicago.

#### Soybeans

The 2004 bull market top met minimum CSA time requirement plus pattern plus minimum price objective. In addition the bull market met the fundamental CSA requirement of the Fusion model with a major weather crop impact during 2003. The long term trend may now be lower into next decade but there will be future 3 yr cycle tops to create seasonal or one year bull markets that will continue to surprise the consumer in terms of price versus supply.

And time has not run out for a CSA 27 yr cyclical top (can arrive as late as 2009) which leaves the door open for a crop impact that could put beans to a new record high. With the corn Big Bang forecast a soybean crop that is not damaged as much as corn could challenge the 2004 high. I will remain with the 2006 forecast for price to **\$10** to \$18.

#### Education

A CD based video is available that presents CSA long term models for several commodities, stock market, economic indicator, fundamentals and weather. See Repetitive Man, Nature and Markets at [www.ag-financial.com](http://www.ag-financial.com)

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