



**Dear Subscriber's Plus, Full-Service Light, and Full-Service Subscribers**

*Attached are our 2021 Target Zone Charts & Summary Analysis Report – November 28, 2020*

**\*\*\* In 2020, there were an unusually high number of factors driving grain prices higher in 2021. That required us to issue several updates of our TZC & Summary Analysis. The Year 2022 will provide the most challenging task ever. Many factors which will be determining the potential rise in grain prices, many which we have not seen or lived through since the 1970's & 1980's. Whereas there may be no need for an additional update, any new or unseen event that would change our price projections will cause 247Ag to issue updated TZC, along with a Supplemental Summary Analysis.**

Already making changes/additions! A new variant of the Chinese Communist Party Virus (**CCPV**) was discovered in South Africa Thanksgiving week. Will stupid happened again, the way governments and Kool-Aid drinkers respond to it?

As the average person knows, when a virus mutates it becomes less deadly, but more contagious. This is a good thing. If this is true, why are governments acting so stupidly to the news? Is it true fear because of stupidity? Or is it because in crisis mode, they find it much easier to force a greater number of the world's populace to give up more of their freedoms?

Point-in-fact, when Trump shut down air travel from China very early on when the CCPV first emerged, Biden called him crazy racist, claiming his actions were totally without merit. Now Biden is shutting down air travel from Africa knowing nothing of this variant. A crazy racist we ask? We have seen this hypocrisy from the Left for nearly 2-years concerning the CCPV. In this specific comparison, you need to ask yourself what the truth is. Notice how the fear they create has alleviated their issue with rising fuel prices, short term. Crude oil futures have fallen nearly 25% in November. The question becomes, will it be directly reflected in fertilizer prices, with NG prices falling about the same percentage?

Look what they have accomplished with these lies. Crude oil prices crashed and burned. That is a political, yet short-term win from an energy standpoint, for this administration. Lower energy prices lower the production costs of everything, as energy is involved in making everything. One can argue lower energy prices curb inflation. It also takes the pressure off the Fed to raise interest rates, which in turn supports the stock market. Blow up the news of another variant into another crisis and it gives this Administration more ammo to keep pushing more CCPV restrictions on the population! It becomes a multifaceted win for the ruling party. Game on, we will scare you into staying home for Christmas and line up for another booster, which they have yet to create.

Our conclusion about this “**new**” crisis is simple. It is another “manufactured” crisis out of nothing new. Nothing has changed. Price action the Friday after Thanksgiving was a knee jerk reaction, creating opportunities for those who understand and can take advantage. To that end, we texted following grains’ gap-open lower the day after Thanksgiving, “***When stupid happens, act. Buy dips. For those needing to add more long corn futures, scale in, buy breaks. \$5.80 July22 corn.***”

Now, let us begin this year’s Summary Analysis Report by reprinting our introduction to last year’s. We believe it is important to review and repeat, because it was events over 2-years ago which set the stage for where we are today and where we are headed tomorrow. The key words to continue to remember as we move forward in time is **New Era** and **change your mindset**.

*First, we would like to say how excited we are about 2021 and beyond. It has been 7-years since we have had fantastic grain marketing opportunities. The one fear we have is that prices could rise too high, sending prices into the dumpster once again. While that always is a possibility, let us not dull the luster of tomorrow’s blessings with worry. We will be wise enough to price 3-years grain production when prices become better than we could have imagined; right??!!!*

*Second, there are more factors behind these rising prices than we have ever had. So much so, for the depth of detail we desire to provide, this report would be too lengthy. To do each one justice and allow readers to digest this report more thoroughly, we are going to break this information into several mailings over 2 or 3 months. This also allows us to help you follow the developments moving grain prices higher and what we are looking for as time progresses. It is our hope that by doing so, it will keep you more in tune with the market, allowing you to make more informed marketing decisions for your operation. Now let us back up a bit and lay the groundwork behind the 2 primary factors driving prices higher: China and World Weather Trends.*

*In September of 2020 we wrote, “It is time to change your mindset! In times of falling prices, which was the “era” we have been in for 8-years since August of 2012, the most profitable methodology of pricing your crops was by selling them for the best price before you harvest. With such poor prices, the cost of carry incurred from storing your crop into the next marketing year would generally not cover any price appreciation.*

*The **New Era** we are entering is the exact opposite of the last 8-years. This will be where you defer all grain sales for as long as you can to generate as much profit as possible. Within this New Era, which should run approximately 4-years, you will need to time your cash grain sales to potential highs for cash flow purposes. During the year, one will see 3 sizable rallies during the year. Now is not the time to worry about the cost of storage, especially on soybeans, which will be the most dynamic market in the 1<sup>st</sup> year of this New Era.”*

*The most important takeaway from the above 2 paragraphs is that “**It is time you change your mindset!**” Mentally, we have been beaten down. After 8-years of low to even lower prices with*

*little if any profits at times, one develops a marketing strategy to preserve assets and avoid risk at all costs. That training must be thrown out the window during this “New Era”. **This is a time where letting profits ride will serve one’s operation with more profits.** The most important thing you can do in riding this grain train is to learn and understand all the reasons behind this push. By doing so, when these Market-Moving-Factors change, you will know it is time to get off this ride and push old crop and new crop sales hard and fast.*

After reading some of last year’s writing, note the highlighted and underlined parts. They have been emphasized with purpose. Please review and consider the long-term thinking behind the comments and how best you could better manage your grain sales accordingly.

Many new market moving factors have entered our markets over the last year. To better understand what is coming at us today and what will be unfolding in 2022, we must be “*Looking Forward with a Backwards Glance*” for future guidance. While that will supply needed insight, not all is the same today as it was over 30-years ago. Many things are vastly different.

The CCPV has been a gift to the politicians, who do not wish to give up all the blessings of power they have been milking. CCPV has made Democracies more Authoritarian and Authoritarian governments even worse. As our government grows more drunk on power, they have been working hard at accumulating this last year, their actions are affecting everyone’s lives and every one’s business in different ways.

We believe most can see our rapidly growing problems are being caused by our government’s decisions. The question is can they change? Can they see they are causing them? How do we make that determination? Judging on recent actions, we must conclude they either have 1) an agenda where the conditions caused by their actions are what they desire or 2) they are afraid to admit they are wrong or 3) they believe they will achieve their end goal or success by doubling down on their current policies.

From our research, we must conclude they see their actions obtaining the desired results. Therefore, we believe they will double down on their current policies, cementing the current trajectory.

We will also note for the record that inflation, which they said is transitory, they have now admitted is not. By also stating inflation, ***which is caused by massive government spending***, is best cured by more massive and unnecessary spending, we have confirmation of this Administration doubling down on their policies.

This Administration's policies to increase inflation at all costs affects agricultural assets and expenses. Repeating, everything you own, everything you produce, and all your input costs are and will be rising in value/cost. In such an uptrend or inflationary scenario, you bring all your costs/expenses forward and differ all cash grain sales.

Current projections give decent odds of the U.S. inflation rate reaching a minimum of 10% in 2022, along with increasing product shortage across the spectrum.

As we are here strictly for how this will affect agricultural producers and prices, our government's actions are directly affecting ancillary markets. Government's mandating drugs/vaccines has workers quitting their jobs. At the same time, our government is shoveling increasing amounts of money to consumers through various programs, allowing more people to not work, since they can make more from government benefits.

Less people working means less production of nearly every necessity of life and less production creates shortages. Having more money in an environment of less production represents a simple supply/demand equation, which we have detailed before. It is the same equation we wrote about in the summer of 2020 and again earlier this year, where everything you own, everything you produce, and everything you need to buy, will be going up in price. Repeating, hold back sales and reach as far forward as possible to lock in all expenses. ***(For newer Subscribers, it is somewhat late now to be reaching ahead, though from a trend standpoint, everything will continue to inflate. The worry is catching prices on a spike high, which then can pull back as much as 40 to 50% and still be in an uptrend.)***

German power prices rose 600% in October, traded lower than the beginning price of the 600% rally in November, then rallied back nearly 600% later in November. We are entering very treacherous and volatile times.



Less production at the time of increasing demand creates the greatest and longest upside price moves, the greatest Bull Markets. When this occurs in grains, which it already has to a degree, it is great for the producer. When it occurs in all markets, like we are experiencing today, it is a 2-edged sword for the producer. How does a grain producer manage if in Year #2 his total expenses to raise a crop are rising faster than are the prices of crops?

Fertilizer prices are screaming even higher this month. Leading the charge higher was UAN32, up an amazing 32% over last month. Liquid nitrogen fertilizers' average price was \$651/ton, which is a new all-time high. NH3 was up 30%, with an average price of \$1220/ton, also a new all-time high. UAN28 was 27% higher, with its average price \$571/ton, a new all-time high. Urea was up 17% at \$859/ton and a new all-time high. 10-34-0 ended up 12% for the month averaging \$739/ton. Potash up 8% at \$769/ton, MAP 6% at \$911/ton, DAP up slightly, and phosphorus had an average price of \$825/ton.

We can hope and pray history repeats, the faster they rise, the harder they fall. High prices are the best cure for high prices. But for the reasons they are rising, will fertilizer prices come back down to earth to a point which offers profitability to the producer? We cannot determine this possibility unless we can forecast if the reasons for fertilizers' historic rise will change and/or reverse in the next 6-months. As written above, we fear these reasons will not change and a long, cold winter will exasperate fertilizers' price rise.

These issues and more, which will be driving prices higher and lower in 2022, are the focus and the basis of this, our **Summary Analysis Report for 2022.**

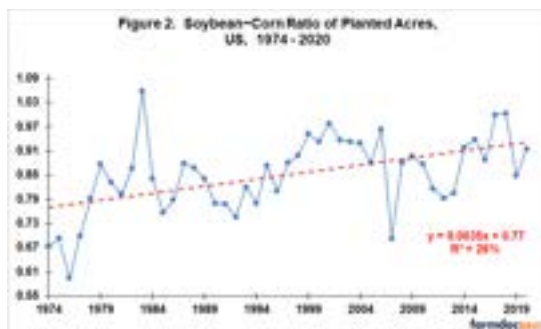
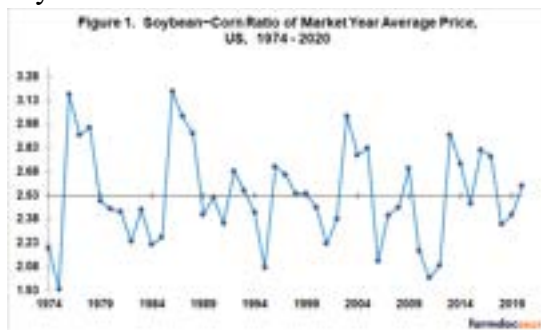
**July 21 Corn:      \$5.50 - \$6.25    /    \$6.25 - \$7.00    /    \$7.00 - \$7.75**

While soybeans will be the weakest of the grains in 2022, corn will be playing 2<sup>nd</sup> fiddle to wheat. When forecasting corn's price strength, like soybeans, we go to corn's S&D table. Current carryover stocks for corn are projected at 1.5 bb for 2021/2022. Historically, stocks that large do not support Dec22 new crop corn futures higher than \$4.80, with lead futures for old crop corn having no reason to rise any higher than \$4.80. Yet, this month has seen Dec21 corn futures north of \$5.80, a \$1.00 higher than where history tells us it should be. If you look at our projected range for old crop corn prices, now through Aug22, our price range acknowledges the many issues facing the corn market over the next 9-months. Corn prices will rise or fall on many factors yet to be determined, which are detailed herein. Like wheat's issue with supplies, traders will be highly focused on new crop corn supplies, where U.S. corn stocks will be at the beginning of their 2022/2023 marketing year. If U.S. corn acreage falls to a point where any yield loss will be unacceptable, corn prices will find themselves in the same position wheat supplies are currently.

**July 21 Soybeans: \$9.40 – \$11.00 / \$11.00 - \$12.50 / \$12.50 – 14.00**

Soybeans are our yo-yo market: a billion-bushel carryover in 2020, going to pipeline supplies in 2021, going over 500 mb in 2022. ***(We need to forecast carryover and world production to forecast price probabilities.)*** U.S. soybean acres will rise in 2022, Brazil's soybean crop will be a record, and China will not honor its Phase I Agreement or its Phase II Agreement. Along with those issues, we are not changing our stance on China having bought all the soybeans they could from South America/Brazil, to stick it to their #1 enemy, the U.S. ***(China is at war with the U.S., though no one desires to say it out loud, as both would deny it. For the present, China is fighting the U.S. on the Economic Front.)*** The confusion for may will be how low can soybeans fall if corn and wheat prices keep rising? Many fall into this trap. It would be natural to believe if corn exceeds \$7.00, soybeans should move north of \$15.00. But price remains a function of supply and demand, with 2022 throwing inflation into the mix. But even with that, traders' attitudes and perception of a market carries weight. We threw the estimated soybean/corn ratio (***ESU***) into the

mix to forecast this year's soybean price levels. Using a guesstimated ESU ratio of 1.9:1, we took a low price of \$5.50 for corn times 1.9, getting us a soybean price of \$10.45. That helped us determine the lower third for soybeans. Using the same ESU ratio, we took a high-end price of corn at \$7.75 times 1.9:1, resulting in a price of \$14.725 for soybeans. We used this method this year, accepting the fact higher input costs for corn will result in lower corn acres, either by choice or not by choice (***lack of fertilizer***), forcing higher soybean acres. The result would be a ***changing*** soybean/corn ratio which favors corn over soybeans.



**July 21 K.C. Wheat:     \$7.50 - \$8.50     /     \$8.50 - \$9.50     /     \$9.50 - \$10.50**

All wheats are working through supply issues, with current demand and supply issues driving their dramatic price gains. End users' greatest concern is finding good or high-quality wheat for processing food grade products for human consumption. A year ago, low wheat prices saw wheat moving into the feed-wheat channels, competing and capping corn's rally. The tables are flipped this year, with wheat prices too high to be considered feed-grade wheat. A producer asks where does the poor-quality wheat go then? We believe it most likely gets blended with high-quality wheat! Remember, it is all about the money. When you deliver below-grade grain, you get docked, sometimes severely. Then the elevator will pay a premium to owners of high-quality grain so they can blend their "crap" grain and get a much higher price. We look for higher wheat prices ahead. We went conservative on price expectations. If the 1<sup>st</sup> "global" wheat crops that get harvested in 2022 come in short and/or of poor quality, our price projections will be too low.

### **Market Factors Summary For 2022**

- 1) Fertilizer/Energy Shortages
- 2) China's Lack of Soybean Demand
- 3) U.S./China Phase I and Phase II Agreements and China's Strategic Grain Reserves
- 4) Back-to-Back La Nina Events Affecting South America and World Grain Production
- 5) U.S. Acreage & Projected Production
- 6) World Weather Trends – Grand Solar Minimums – Antarctic Cold
- 7) U.S. & World Carryover Stocks – Production
- 8) Exports of Competing Nations
- 9) Biofuel Demand Equation
- 10) Excessive/Massive/Insane U.S. Spending/U.S. Debt/Inflation/USD Trend

**It is time to change your mindset!** That is how we began our Summary Analysis for 2021. In times of falling prices, which was the "era" we have been in for 8-years since August of 2012, the most profitable methodology of pricing your crops was by selling them for the best price before harvest. With such poor prices, the carrying cost of storing your crop into the next marketing year would generally not cover any price appreciation.

**From our research on the energy and fertilizer issues facing the Ag sector, alarm bells went off.**

So much does not make sense from a simple, commonsense standpoint. Many things must occur in concert for the global markets to come face-to-face with the problems developing today. The word “orchestrated” comes to mind, a planned event of intentional making. What are the odds? It would be like shuffling a deck of cards. What are the odds the cards get arranged in the same order twice? Mathematically, nearly impossible.

Our research brought us to conclude the odds are extremely high of *energy prices and a fertilizer shortage being the #1 issue behind where grain prices move in 2022*, with several of the remaining 9 having a strong hand in guiding prices higher, too.

The following analysis suggests *it is not possible to forecast how high corn prices could rise in 2022*. The fertilizer shortage is a developing story. If this emerging fertilizer shortage is orchestrated to create another crisis and it unfolds along the same trend we are witnessing this fall, how high some grains can yet rise and how many will starve from the intended food shortages cannot be computed at this date because we do not yet know how short the world will be on nitrogen or other fertilizers.

If global corn production is cut 5% due to fertilizer shortages, not considering any shortfalls from weather related issues, corn prices will spike. Taking 5% off 180 bpa takes the U.S. yield down to 171 bpa. Right there would be \$7.50 corn in 2022.

We also must consider losses in wheat production, as it needs nitrogen, too. With wheat prices where they are today and heading higher, global stocks of high quality, high protein wheat cannot afford to have production losses due to weather related issues or fertilizer shortages. Higher wheat prices will make for higher corn prices.

Then you have the fear factor. If world end-users begin to fear reduced supplies of food, feed, or grains and they fear even less supplies in the future, all will forget about just-in-time inventories and begin building reserves. It will be like the toilet paper shortages last year. Fear makes humans do the unimaginable.

Our attempt in this writing is not to scare, but to educate. You should not be making any corn sales until we know how this fertilizer issue/shortage plays out during the 1<sup>st</sup> quarter of 2022. If it is being orchestrated with an end-goal in mind, we should have further evidence by March of 2022. Until then, be patient and attentive.

Energy, or the lack thereof and the issues it is causing nations, is in the news nearly every day. This is not to say its influence is only on a few sectors, such as fertilizer production. Energy affects every sector of the economy. Lack of energy can cause chip plants to shut down. That directly affects any electronic devices from phones to computers, cars, trucks, tractors, construction equipment, more things than most realize.



A shortage of workers has the same effect, as it slows production, whether it is in fertilizer manufacturing, soybean crush facilities, trucking, unloading containers from ships, or hog processing facilities. In a global market, everything, and we mean everything is intertwined.

Cars have 100's of components. If only one component needed for that car to operate correctly cannot be produced and shipped on a timely basis to the automobile manufacturing plant, there is a high likelihood that the plant will have to shut down. That is in fact what is occurring today, and the expanding issues associated with these production problems are only getting worse.

The potential of a fertilizer shortage first hit the scene with Hurricane Ida. As it came on shore in August, the largest ammonia factory complex in the world closed for safety reasons. It opened 10-days later, but that is 10-days with no fertilizer being produced. Global fertilizer supplies were reduced.

CF Industries then closed 2-more fertilizer plants in the UK in September, citing high NG prices as the reason. Those 2-UK plants supply around 60% of the UK's domestic fertilizer demand. These 2-plants were re-opened when the UK agreed to pay emergency subsidies to CF Industries. Did they need to close? No. Greed appears to be the culprit. Global fertilizer supplies were reduced even more.

Yara International announced that it is curtailing ammonia production at several of its European sites, citing the record high gas prices and the impact on margins. Including optimization of ongoing maintenance, Yara will curtail around 40% of its European ammonia production. Global fertilizer supplies are being reduced even further.

It was also reported Fertiberia, the Spanish fertilizer heavyweight, will be curtailing operations at some of its production sites. Fertiberia management has reportedly decided to stop production at its Palos de la Frontera site from October 1<sup>st</sup>. Its Puertollano factory remains in a scheduled shutdown for ongoing investments. Additional losses to the Global fertilizer supplies.

Gasworld has learned that more plant closures are to be expected, as the knock-on-effect of record high gas prices continue to play out. We also note that the closure of fertilizer capacity in Europe due to soaring gas prices will curb supplies of nitrogen fertilizers, which will have a knock-on effect on supplies of CO<sub>2</sub> in Europe.

In fact, looking at current gas prices and futures gas prices, nitrogen fertilizer plants in Western and Eastern Europe, as well as Ukraine, are currently in negative margins producing ammonia. As such, further plant closures are expected in these regions.

Lithuania's Achema cancelled plans to restart its ammonia facility at the end of August. High production costs have led to a partial closure of ammonia production at OCI's Geleen plant in the Netherlands.

Chemical giant BASF has become the latest to curtail certain fertilizer production capacity, due to “extremely challenging” economics at the hands of high natural gas prices. May we repeat, world availability of fertilizer supplies keeps getting reduced.

All this piles more pressure on the nitrogen fertilizer industry, with demand expected to be relatively strong in Europe for ammonia, urea, and nitrates over Q4 2021 and Q1 2022. It is expected they will need to be served by imports, but from where? China and Russia have both curbed their fertilizer exports. Russia will limit exports of nitrogen fertilizers for 6-months to curb any further increase in food prices, as will China.

*Be it known that fertilizer production creates CO<sub>2</sub>. Thus, there will be a shortage of CO<sub>2</sub>. Think carbonated beverages and higher prices.*

**THIS MONTH, Yara CEO stated he is fearful of a food crisis tied to the energy crunch which has made fertilizer too expensive to produce.**

Svein Tore Holsether, Yara’s CEO, says, *“I want to say this loud and clear right now, that we risk a very low crop in the next harvest. I am afraid we are going to have a food crisis.” “To produce a ton of ammonia last summer was \$110, and now it is \$1000. So, it is just incredible.”*

Holsether argues many smallholder farmers cannot afford the higher costs. Also, food security is already under threat from the CCPV pandemic, as well as other weather-related issues. Even worse, *Holsether is concerned that the delayed effects of the energy crisis on food security could mimic the chip shortage crisis.* He said, *“That is all linked to “chip” factories being shut down in March, April, and May of last year, and we are reaping the consequences of that now.”*

He continued his analogy by saying *“if we get the equivalent to the food system...not having food (chips) is not annoying, that is a matter of life or death.”*

Worsening the overall global fertilizer crisis, the Biden Administration slapped sanctions on the Belarus government, explicitly naming Belaruskali OAO, the world’s 4<sup>th</sup> largest fertilizer producer, for “sustaining the Belarusian regime at the expense of the Belarusian people.” Belaruskali controls about one-fifth of the world potash-based fertilizer market.

Digging into some fertilizer facts, estimates show about half of the global population is dependent on nitrogen fertilizers. The scientific journal Nature reports 48% of the world population in 2008 was dependent on nitrogen fertilizers for their daily access to food. Nitrogen fertilizers in 2015 provided food security for 3.5 billion people who would have otherwise starved to death.

Adding a huge shock to the growing global fertilizer shortage is the decision by Beijing in recent weeks to severely cut and/or freeze fertilizer exports for a variety of reasons, including shortages of coal and NG for electrical power, in a panicked attempt to control domestic inflation.

***(This ban is expected to last until at least June of 2022.)*** Record summer floods in Henan Province hit the heart of the China grain region in 2021, and the government has begun a campaign to have citizens undergo Round #2, ***“Clean Plate Campaign 2.0”*** to stop food waste, which some believe is a way to disguise the seriousness of recent harvest failures.

***China***, India, and the U.S. are by far the world’s largest users of nitrogen fertilizers in tons per acre. ***(This explains why China has, for all practical purposes, halted exports of fertilizers. They need to control food price inflation, as well as guarantee their ability to grow their crops to their maximum yield potential. The same would be true with Russia.)*** With soaring NG and coal prices, China has seen significant electric power blackouts owing to electric companies closing rather than selling power at a loss. ***China “was” the largest exporter of urea, accounting for nearly a third of the global supply – A Third!*** ***(After reading this far, let that sink in.)*** China is also a major manufacturer of phosphate.

For informational purposes, Brazil produces 2% of the world’s fertilizers and thus is highly dependent on importing these products. Brazil imports 94% of its potassium, 76% of its nitrogen – used heavily on corn fields – and 55% of its phosphorus. According to the National Association for the Diffusion of Fertilizers, around 32 of the 40 mt of fertilizers delivered to Brazilian farmers in 2020 came from the international market.

Brazilian fertilizer imports exceeded 24 million tons in the first nine months of 2021, according to the Secretary of Foreign Trade, part of the Ministry of Economy in Brazil. That was 13% higher than the same period last year. Brazilian imports of potassium chloride in the period were 8.24 mts, a growth of 9.22%. Urea imports from January to September totaled more than 5.37 mts, 10% higher than during the same period last year.

Despite the increase in fertilizer imports in Brazil, with planting starting in January 2022, there is a risk of some farmers not receiving the product on time. Even so, this should not affect the projected planting area for the Safrinha crop in 2022. Planting is expected to total a record of 39.20 ma, an increase of 5.8% in relation to the last harvest. If fertilizer is not available, Brazilian farmers will likely reduce, or even forgo applying fertilizer.

The United States has increased its nitrogen production by over 40% since 2015, thus reducing nitrogen imports to only 12.5% of 2019 consumption. For phosphate, the U.S. imports less than 10% of the annual consumption. And the U.S. imports over 90% of the domestic potash consumption, the majority from Canada.

Do we mention how the Biden Administration has assisted in creating this situation? They have ***“forced”*** disinvestment in USA shale gas and ***forced*** expansion of highly-***government subsidized*** Green Energy, such as wind and solar, creating an unreliable electric grid in the U.S.

Also, to the Biden Administration and the EU is deliberate “anti-carbon” green policies, with its ***“Fit for 55”*** program to cut CO<sub>2</sub> emissions by 55% by 2030, including NG and methane. ***This is behind the growing global fertilize shortage crisis and the 5-fold explosion in the prices of NG and methane.***

In countries such as energy-dependent Germany, alternatives can make up 42% of gross electric consumption. As nuclear and coal plants are taxed into extinction to meet their Zero Carbon stupidity/madness goal, prices for oil and NG are exploding. ***New investments in hydrocarbon exploitation are collapsing*** as a direct result of this green energy idiocy and supplies of hydrocarbon fuels are limited just as everyone needs them. ***(New investments in hydrocarbons will not take place if governments are dead set on destroying their use/marketplace.)***

In conjunction with the demonization of oil/hydrocarbons, there is a growing demonization of agriculture, especially meat production, claiming it is a major source of global warming (*a lie*). Methane from the U.S. and the EU is now a major target of the Green Agenda. Notably, at the recent UN COP 26 global warming gathering, some 100 nations (*not China or India*) signed on to a joint EU-US proposal to cut methane gas emissions by 30% by 2030. We can expect to see growing government and NGO attacks on our food system ***using soaring fertilizer prices (which they have conveniently created a “crisis” to support their claims)***, campaign against meat and demands for “sustainable” agriculture to further raise our now soaring cost of food.

The key to their attack is the Green New Deal war on oil, gas, and coal, the low-cost energy system that has been the heart of today’s global economy and escape from poverty since WWII. The Globalists seek to destroy that which works, disrupting everyone’s lives by reeking economic suicide on 100’s of million and starvation on just as many. To their benefit, they seek to gain power and control over those they can economically destroy. To the rich goes the spoils. Do we have this wrong? We can only pray if we do and pray even more if we do not.

Whether the world’s fertilizer shortages are ***real or contrived***, one must ponder why it is occurring. What forces have led the world to have all these many supply issues at once? Whose hands does it play into?

It is often said one should never believe in coincidences. In this case, there are too many. Our research gives credence to our belief that this is an organized takedown of the Global Fertilizer Supply with a specific end-goal in mind.

Ammonia-based fertilizers are made from nitrogen. Nitrogen is in the air we breathe. It makes up 78% of our air. There never is a shortage of nitrogen. NG or methane, CH<sub>4</sub>, make up almost 70% of the fertilizers used to support major agriculture crops such as wheat, corn, rice, and even coffee. Why, all at once, is there a shortage? How, all at once, could there be a shortage?

They say it is the high cost of NG that caused them to shut down fertilizer facilities, as they could not produce it due to the high cost of NG.

We portend that is a lie. The only reason not to produce a much-needed product is if those who need it will not pay “whatever” for it.

Midwest corn producers are willing to pay \$1400/ton or more. ***(Corn prices will rise as high as necessary to get farmers to plant the crop. We know this is true.)*** Yet, most are being told there is none available to purchase. Manufacturers are not even offering it at any price. One must ask why. We have seen price quotes for the product around \$1100, but none is being made available. Few are setting a price for the products. The real story is out there, but nobody is talking.

When we read all this data, should we fear how high corn and wheat prices can rise? Are we just now witnessing the tip of an iceberg? Is it possible to recognize or even understand or compute just how much a world shortage of ammonia can reduce Global production of those grains which need it the most? How much Global food production is lost if the world is short 5% of its total ammonia needs in 2022? How much is lost if the world is short 10% of its ammonia needs?

Maybe the better question is how much of the rest of the world goes without ammonia or other fertilizers if Russia and China have zero fertilizer exports over the next 8-months? Mentioning the numbers again, the U.S. produces 90% of its overall fertilizer needs. South America needs to import 80% of its fertilizer needs. Counting our blessings, we will see the truth in this fertilizer shortage before U.S. producers need fertilizer. It will be reflected in old crop prices in Q1 of 2022, that end users will be willing to pay for grains that might not be available in Q4 of 2022.

One forgets that animals need this food to survive. Humans are animals, too. Where does this put us in this equation? We should rephrase by saying, where does this leave the billions of people who live in poverty, two meals or less a day?

Where does this leave the world’s livestock? Meat prices fall as grain prices rise. Within 2-years after grains top, livestock prices rise. This has to do with meat shortages later, as producers take their animals to slaughter early due to their inability to find affordable feed sources.

It takes a long time to work shortages of anything through the global pipeline. Few can envision the ramifications of just one segment in Global Food Production disrupting the entire Global Food Chain.

No fertilizer for crops that must have it means lower to very low production of those crops, or even crops that do not get planted. Producers will opt for other crops that do not require those expensive inputs if final yields are suspect. If there is a major switch to other crop (s), the price of one will then fall and the price of the other will rise. The question is how dramatic the price fall versus the price rise.

This equation needs to also consider accelerated yield losses for crops shorted of their fertilizer needs. These crops will not manage stress or drought well. Yield losses are much greater under stress if plants' nutrient health is not properly maintained.

Looking forward with a backwards glance does not give us all the answers. Mr. Holsether gives us some useful insight into the possibilities. Inflation, in the context of runaway commodity prices while ignoring governments' massive spending, is a function of rising demand and falling production. Greed and human psychology become additional components for computing upside price probabilities.

One must also realize that if a crop in one country is reduced in size because of weather, another country's crop could be increased because of better weather, thus creating a balance in global production. Generally, crop production averages out year-over-year, with a shortfall in global production likely being made up every 6-months with those same crops being grown in a different hemisphere.

This new disruptive variable which is being injected into Global Food Production does not have the option of offsetting losses in other nations. It will only create production shortfalls of specific crops, increasing production of other specific crops. This is not good and is a variable the Global Food Chain has never had to deal with in our memory or maybe forever. That leads us back to our original question, *real or orchestrated?*

The positive aspect of this potential fertilizer shortage comes to U.S. corn producers who have elected to store all their 2021 corn production. You can sit on your hands for the next 5-months to see how this fertilizer "debacle" unfolds in South America. If it is as bad as it appears as of this writing, it will manifest itself in corn's price appreciation, as end users begin chasing to secure **ALL** their needs for the next YEAR and beyond! The 1<sup>st</sup> one to the trough gets fed and pays the lowest price. The last one's do not get to eat. Next year could be one for the history books.

End users fearing a 2022 crop reducing event will be chasing for food/grain they can grab now. That means old crop supplies. Old crop prices will see the demand, front loaded. Lead months will see the greatest, fastest, and most explosive price reaction to a potential shortfall in 2022 production. Based on this analysis, price is not showing this type of fear yet. Prices have not inverted, the sign of a true, demand driven Bull market, with future supplies in doubt. When lead month grain prices become the highest traded price, ***that tells you the market knows for a fact, there is or is going to be a problem.***

Wheat may be the market we need to watch as the leader under this scenario. Of the 3 main grains, it has the tightest S&D table. Depending on which wheat and on what soils, wheat's fertilizer demand could be as high as corn's. With wheat struggling with tight supplies, wheat plantings/acres may become less viable in 2022 than currently projected, if fertilizer prices remain as high or higher 5-months from now.

<https://www.youtube.com/watch?v=UHPaxu5s7sE>



**Moving on!** **#2 and #3** are China's lack of soybean demand, U.S./China Phase I and Phase II Agreements, and China's Strategic Grain Reserves.

We have focused on China's lack of demand for U.S. soybeans for several months now, while many have remained very positive. We can point to Brazil's massive crops from last spring and summer, with China stepping up to the plate, sucking up every bushel from their #1 supplier of soybeans, which have higher soybean oil content than U.S. soybeans.

China has struggled maintaining growth of their hog herds over the last 2-years, reducing their need for soybeans and soybean meal. Knowing their true feed grain needs is not possible. Securing any data out of China, let alone good data, is difficult at best. We extrapolate and base our projections on what we believe are the best numbers we can secure.

That said, our analysis shows China did not need all those soybeans from Brazil. We see those purchases as purchases that go to replenishing their shrinking strategic grain reserves. That gives China the ability to "stick it to the U.S." when they so desire. We project China is not going to buy the bushels the USDA says they will and those who still believe so are living in La La Land and/or trying to market "bullish" arguments to secure more clients.

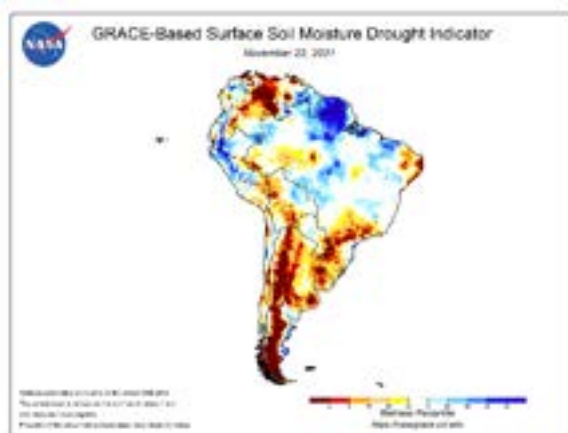
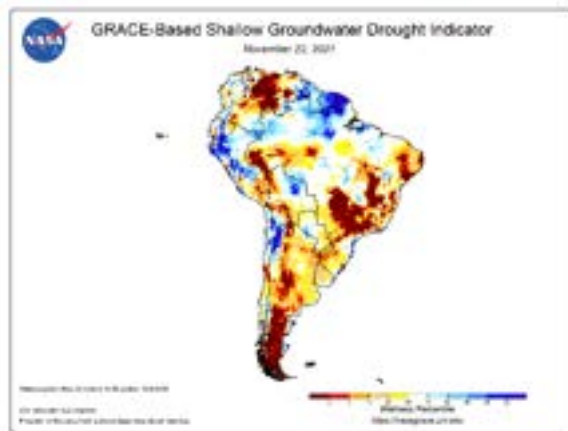
We know "selling" a bullish scenario secures more clients, but that is something we will never do. The advice we offer we support in our mailings with market facts. Producers will make more money if they know the truth about what is driving markets higher or lower. That was our reason for recommending selling new crop 2022 soybeans. We see more risk of the market price for soybeans falling and more risk of corn prices rising. We cannot forecast if the corn market is going to go crazy high, lifting soybeans higher than we currently believe is possible. But if we are right in our marketing recommendation of selling beans and owning those dollars in corn, it becomes irrelevant, as you profit on the scenario of future corn supplies ending up much tighter than soybeans.

We have never believed China would honor the Phase 1 or Phase II Agreements. They are not honorable people – specifically referring to those in their government and/or companies in or outside of China who are financially obligated to the Chinese government. China fully expects the other party to honor their agreements, to the benefit of China. Their thought process is the same as those in power in the U.S., their ends justify their means. Just cross off those Phase Agreements. They mean nothing.

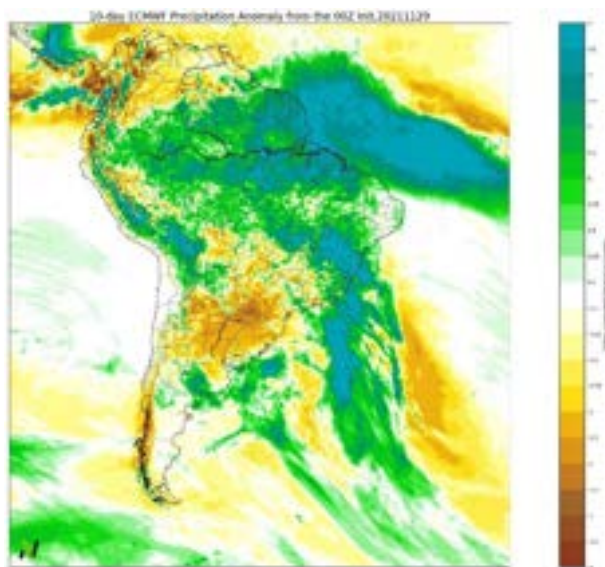
**Number 4 on our list** is this back-to-back La Nina event and what it means to crops in South America and to World Grain Production.

Most records indicate that when the world experiences back-to-back La Nina years, droughts in South America tend to move further south in Year #2 versus where the dryness was in Year #1. If this pattern were to repeat in 2022 for South America, we would see dryness in the southern regions of Brazil, spreading into Argentina. Such is the case as of this writing.

You can see by the 1<sup>st</sup> map that groundwater issues persist in Brazil from this year's severe drought. Looking at the 2<sup>nd</sup> map of surface soil moisture, you can see extensive moisture issues in southern Brazil and into Argentina. Current forecasts maintain the expected dryness.







If history repeats in South America, they will have its 2<sup>nd</sup> record large soybean crop, 2-years running. China says thank you very much to Brazilian producers, we will take it! If this is what occurs, China can and will diss soybean purchases from the U.S. most of 2022.

If this La Nina hits Argentina as expected, their corn and soybean yields should be off by at least 10 mmt each. Generally, drought losses in Argentina are typically offset by yield gains in Brazil. Losses in Argentina need to be near 30% for Brazil not to be able make up the difference. If the total soybean deficit of these 2-nations does not exceed 5 mmt from beginning estimates, market prices should find little, long-term support. We feel the potential yield loss in 2022 has already been offset by Brazil's massive crop in 2021, which now sits in China's strategic reserves.

**In the Big Picture #5**, U.S. acreage & projected production will not give any lift to world grain prices – unless U.S. corn acreage is cut by more than 2 million acres. Recent price action says this will not happen. Corn acres could increase, if it were not for such high prices for other crops competing for acres. Thus, the trade is projecting a 2 million acre cut for corn, in an all-out battle for acres. Fertilizer, and the lack thereof, **can totally change market dynamics**.

U.S. grain plantings for 2022 are not locked in stone. For 2022, much can change in the next 5-months. The timing of less fertilizer production appears to have mostly missed falling on South America. Seeing how it appears Brazil's Safrinha crop's fertilizer needs are "mostly" covered, their yield losses from the lack of fertilizers may well be muted in 2022. If this is the case, corn's risk to production would fall on the U.S. and Ukraine.

Without making any wholesale changes in initial projections for the 3-major grains in the U.S., let us compute next year's grain prices on these base numbers.

Starting with soybeans, acres are guessed up 2 m at 89 m. With trendline yield, placing demand as currently projected, carryover comes in at 416 mb, with an ESU of 9.5%. This is the number traders will be watching. Any ESU number at 9.5% or greater, will command a cash price under \$10/bu. The question that needs to be posed is if acres will get this high. We will argue yes, because of wheat prices. Further south, it will pencil better to plant wheat and 2<sup>nd</sup> crop with soybeans vs planting corn. This scenario is likely, unless corn prices rally \$1.50 between now and then, which is not out of the question.

If soybean acres wrap up to 91 m, their ESU ratio jumps over 11%, with carryover above 500 mb, guaranteeing a cash price under \$10.00/bu. We need to remember that psychology and perception of what may be coming at the market can raise or lower a commodity's value, in this case soybeans, upwards of \$1.00/bu. If the trade perceives ample supplies in the future with a current ESU ratio over 11%, at times the cash price for soybeans could easily fall under \$9.00/bu, with an ugly basis.

The reverse is also true. If the trade perceives the soybean market will tighten in the year ahead, prices can rally \$1.00/bu above fair market value, giving soybeans a potential price range of 20%, low to high, just on psychology and trade perception. With the many factors driving prices, some of which we have not had to deal with in decades, volatility will be the name of the game. These new factors will weigh more negatively on soybean prices and more positively on corn prices.

Soybeans	USDA		StoneX Estimates			
	2020-21	2021-22	2020-21	2021-22	2022-23	2023-24
	Old-Crop	New-Crop	Old-Crop	New-Crop	Alt #1	Alt #2
Planted Acres	83.4	87.2	83.4	87.2	89.0	91.0
Harvested Acres	82.6	86.4	82.6	86.4	88.0	90.0
Yield (bu/a)	51.0	51.3	51.0	51.9	50.9	50.3
Beginning Stocks	325	256	325	256	375	371
Production	4,216	4,425	4,216	4,484	4,418	4,517
Imports	20	15	20	15	22	23
Total Supply	4,761	4,696	4,761	4,755	4,815	4,911
Crush	2,141	2,180	2,141	2,220	2,280	2,265
Other Domestic	98	117	98	119	125	125
Total Domestic Use	2,339	2,397	2,340	2,339	2,375	2,390
Exports	2,265	2,090	2,265	2,345	2,000	2,000
Total Use	4,595	4,396	4,595	4,384	4,395	4,410
Ending Stocks	256	340	256	371	416	501
Stocks to Use	5.7%	7.8%	5.7%	8.0%	8.6%	11.4%
Days of Supply	26.7	28.5	26.8	30.9	34.6	41.4
Average Cash Farm Price	\$10.80	\$12.30	\$10.82			

Corn and its market moving factors will be dictating some of soybeans future price direction. Average trade guess for corn acreage in 2022 is down from 2021 acreage of 93.3 m, coming in around 91 m. Trendline yield, which the U.S. producer has not reached in over 5-years, is just over 179 bpa. At these numbers, U.S. 2022/2023 corn carryover stocks rise nearly 100 mb, with an ESU ratio of 10.6%. A ratio that high historically caps old crop corn futures at \$4.50. The question today is why is Dec21 corn futures trading above \$5.80?

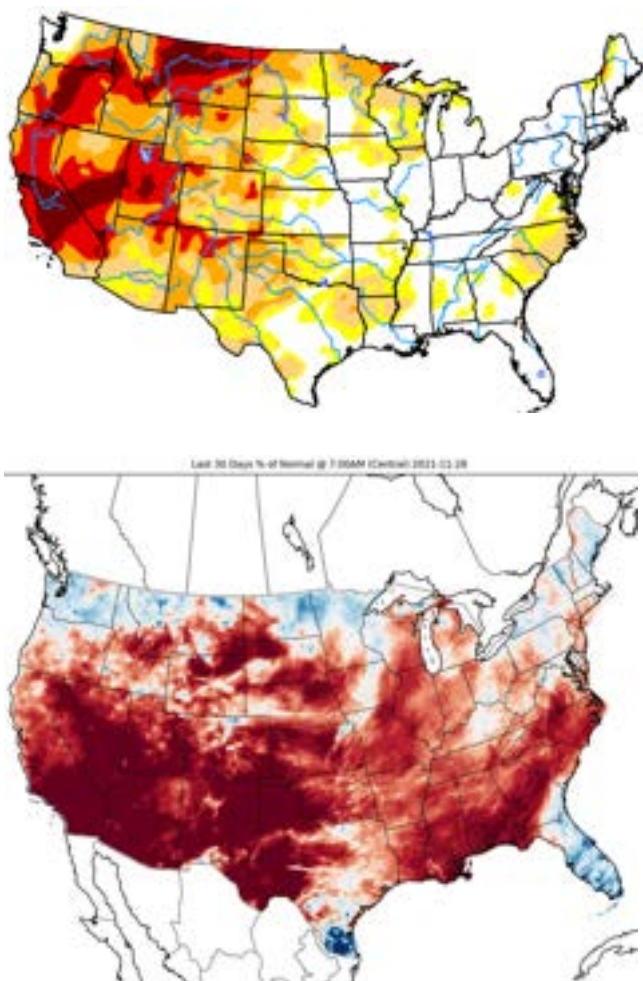
There are several reasons for this besides psychology and trade perception. One is this fall's abnormally strong basis. That was an indicator the USDA had our carry-in number wrong. That would be the ending carryover corn stocks number for this last marketing year, 2020/2021.

That number feeds in directly to the USDA's beginning carryover stocks number for 2021/2022, meaning if they are wrong on the carry-in stocks number, their beginning number for U.S. carryover stocks of 1.494 bb in their November WASDE Report would also be wrong, but by how much? Based on reports from end users and by basis levels, we would estimate 2021/2022 carryover stocks are near 1.3 bb. That still may be high when you look at current cash prices across the Midwest. Supplies remain tight, especially in some locations, shown by the board price trading at \$5.80 and cash prices running from \$5.90 to \$6.60 from Montana, Wyoming, Colorado, Kansas, Oklahoma, Texas, Missouri, Arkansas, Mississippi, Louisiana, and the Carolina's.

With corn setting its fall low at \$4.97 on September 10<sup>th</sup> in Dec21 futures, a normal 20% rally off this low gives us a guaranteed board price of \$6.00. Our minimum upside objective for old crop corn is \$6.40. There are several factors that will drive corn prices higher. How far off the USDA is on their carryover projection is one. Corn acres lost to double cropping is another. High wheat prices will take some acres from corn, as will record high cotton prices. Lastly may be the lack of available fertilizer, which could be the main driver behind corn prices in 2022. The fear of the lack of fertilizer for U.S. corn in 2022 could be the main price driver for corn. Translation? Corn's high may well arrive in March or April, if fear overwhelms reality.

Corn	USDA		StoneX Estimates			
	2020-21	2021-22	2020-21	2021-22	2022-23	2022-23
	Old-Crop	New-Crop	Old-Crop	New-Crop	Alt. #1	Alt. #2
Planted Acres	90.7	93.3	90.7	93.3	91.0	89.0
Harvested Acres	82.3	85.1	82.3	85.1	83.5	81.7
Yield (bpa)	171.4	177.0	171.4	177.7	179.0	179.0
Beginning Stocks	1,919	1,236	1,919	1,236	1,576	1,576
Production	14,111	15,062	14,111	15,122	14,950	14,622
Imports	24	25	25	25	25	40
Total Supply	16,055	16,323	16,055	16,383	16,552	16,238
Feed	5,601	5,650	5,597	5,720	5,875	5,875
Other Domestic	6,465	6,680	6,469	6,687	6,737	6,737
Fuel for Ethanol	5,028	5,250	5,032	5,250	5,300	5,300
Total Domestic Use	12,066	12,330	12,066	12,407	12,612	12,612
Exports	2,753	2,500	2,753	2,400	2,350	2,350
Total Use	14,819	14,830	14,819	14,807	14,962	14,962
Ending Stocks	1,236	1,493	1,236	1,576	1,590	1,276
Stocks to Use	8.3%	10.1%	8.3%	10.6%	10.6%	8.5%
Days of Supply	30.4	36.7	30.4	38.9	38.8	31.1
Average Cash Farm Price	\$4.53	\$5.45	\$4.53	\$4.45	\$4.45	\$5.35

Wheat is the “exploding” market in the 3-grains. What is in our minds is if corn and soybeans will have their day in the sun soon, or will it be in another year, sometime soon? We could see corn having its day next year; maybe. A surprise drought could make that happen, as conditions for that are ripening. Historic trends do not necessarily agree.



Eastern states have had difficulty getting their wheat crop in, as conditions have been consistently too wet. The last plantings report had Illinois 90% planted, Indiana 96%, Ohio 95%, and Michigan 94%.

The Southwestern Plains have been overly dry, seeing their wheat acres going into dormancy under very poor conditions. In fact, wheat's G/E rating was last reported at 44%, down 2 points from the previous week. Some states are in very poor conditions, with OR at 36% G/E, WA 19%, MT 9%, SD 37%, TX 22%, KS 61%, NE 63%, MI 44%, OH, 58%, IN 68%, IL 85%, and OK 55%. You may note that for the most part, the largest producing wheat states have the worst condition rating.

If weather permits next spring, wheat acres will increase substantially, with most projecting a minimum increase in acres of 2 m. Wheat's ESU ratio is nowhere near as tight as corn or soybeans. The reason for wheat's rise to fame is not where U.S. wheat stocks are, it is where global wheat stocks reside.



China holds the world's share of global wheat supplies, but they are not an exporter of wheat. Russia is the #1 exporter of wheat, but they have placed an export tax on their wheat to limit exports, working to control internal food price inflation after having a very short wheat crop last year. As of this week, Russia increased its wheat tax for the upcoming December 1<sup>st</sup> through 7<sup>th</sup> period by another \$2.25/mt, raising its total export taxes on its wheat to \$80.80/mt. That is much higher than originally intended, having to rise due to the world price rising much faster and much higher than forecasted.

And like the U.S. wheat crop, Russia's wheat crop is not going into hibernation in very good condition as they have had drought issues, too. That leaves both crops suspect to potential production issues in 2022.

That is critical as Russia is the #1 wheat exporter, with Canada and the U.S. nearly tied for the 2<sup>nd</sup> and 3<sup>rd</sup> spot, each capturing about 12.5% of the wheat export market. France comes in the #4 slot getting 10% of the market, with Ukraine coming in at #5 with a 6.2% share, followed by Argentina at 6.4%.

With the U.S. and Canada projected to have razor thin export supplies by the end of this marketing year, it could be a long, tough winter on needy importers who may be caught short before any new crop supplies become available from any harvests from Southern Hemisphere nations, which should not be available until late February at the earliest.

Remaining stocks, demand, and new crop conditions will drive prices higher into Q1 of 2022, before likely putting a top in February or March of 2022. A drought hitting either the U.S. or Russian wheat crops in March, April, May timeframe would make this market very explosive, as would a fertilizer shortage.

Wheat	USDA		StoneX Estimates			
	2020-21	2021-22	2020-21	2021-22	2021-22	2021-22
	Old-Crop	New-Crop	Old-Crop	New-Crop	Bear	Bull
Planted Acres	44.5	46.7	44.5	46.7	46.7	46.7
Harvested Acres	36.8	37.2	36.8	37.2	37.2	37.2
Yield (bpa)	49.7	44.3	49.7	44.3	44.3	44.3
Beginning Stocks	1,028	845	1,028	845	845	845
Production	1,828	1,646	1,829	1,646	1,646	1,646
Imports	100	115	100	120	125	135
Total Supply	2,957	2,606	2,957	2,611	2,616	2,626
Feed	95	135	95	160	115	180
Other Domestic	1,025	1,028	1,025	1,026	1,025	1,025
Total Domestic Use	1,120	1,163	1,120	1,186	1,140	1,205
Exports	992	860	992	855	850	875
Total Use	2,111	2,023	2,112	2,041	1,990	2,080
Ending Stocks	845	583	845	570	626	546
Stocks to Use	40.0%	28.8%	40.0%	27.9%	31.4%	26.2%
Days of Supply	146.1	105.2	146.0	101.9	114.8	95.8
Average Cash Farm Price	\$5.05	\$6.90	\$5.04			

**World Weather Trends, Grand Solar Minimums, and Antarctic Cold came in the #5 slot.**  
With a back-to-back La Nina event, it throws drought possibilities up in the air.

When you look at the U.S. Drought Monitor Map, drought conditions are building, when added to the other issues, one can add additional fear into the market in the 1<sup>st</sup> half of 2022.

Our forecast has drought fears doing more for prices through 2022 than actual crop losses from drought. The exception to this will be wheat. Odds suggest a dry/drier start to the 2022 growing season, or the 1<sup>st</sup> half of 2022. This could easily give the market the idea that wheat losses will be greater than what the market can accept. That is an interesting thought, with wheat stocks already too tight to be acceptable. Any perceived crop losses **to any nation's wheat crop** early in 2022 will be met with price appreciation. Adding in a fear factor, wheat prices could easily do stupid, lifting corn prices as well.

We will keep mentioning a possible fertilizer shortage for U.S. wheat. The U.S. wheat crop will need fertilizer before the corn needs it.

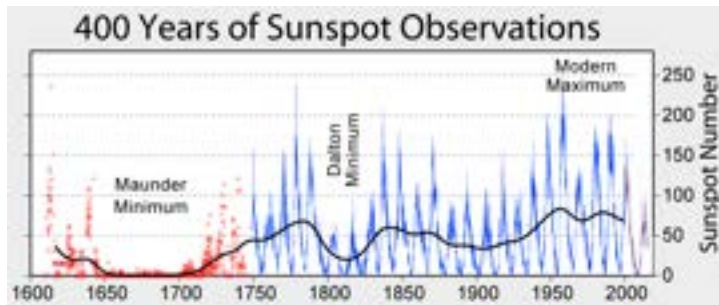
Argentina production needs to be monitored intently. Its wheat crop could have issues with drought, though all is okay as of this writing. Their corn and soybean crops will be suspect to losses in 2022, though likely somewhat offset by a very good crop out of Brazil.

Remembering the multiple, very early freezes which damaged Brazil's Safrinha crop this year, is likely to repeat in 2022. The difference in 2022 appears to be with its planting date. This year's soybean crop went in very early, compared to average. Odds are that their Safrinha crop will also go in early versus last year's corn crop which went in late. Even with an early freeze again in 2022, damage to their Safrinha crop will be much less, if at all, just due to the planting date.

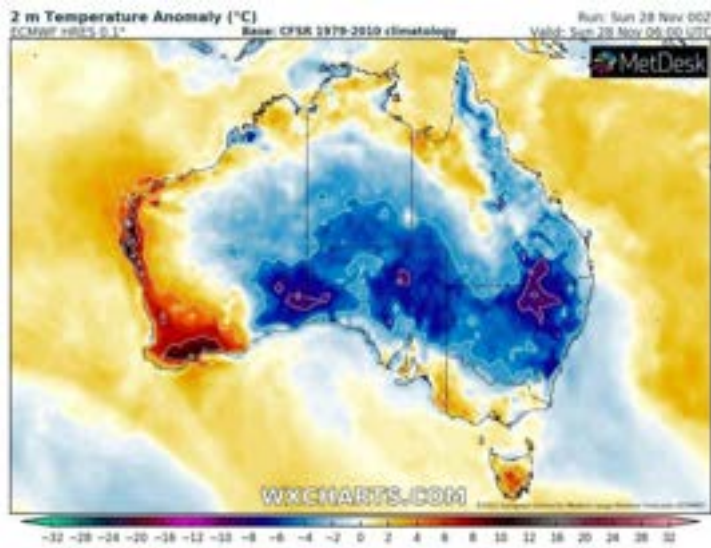
### **Grand Solar Minimums and Arctic and Antarctic Cold.**

With the sun's solar activity moving to its minimum phase, a cooling trend is enveloping the earth. Just like the earth keeps warming for nearly 6-weeks after its summer solstice in June, the earth keeps warming for many years after the sun reaches its Grand Solar Maximums. We are seeing strong signs of global cooling, which the believers of "climate change" (***which it does every minute of every hour of every day***), their new term for global warming, are ignoring with reason.

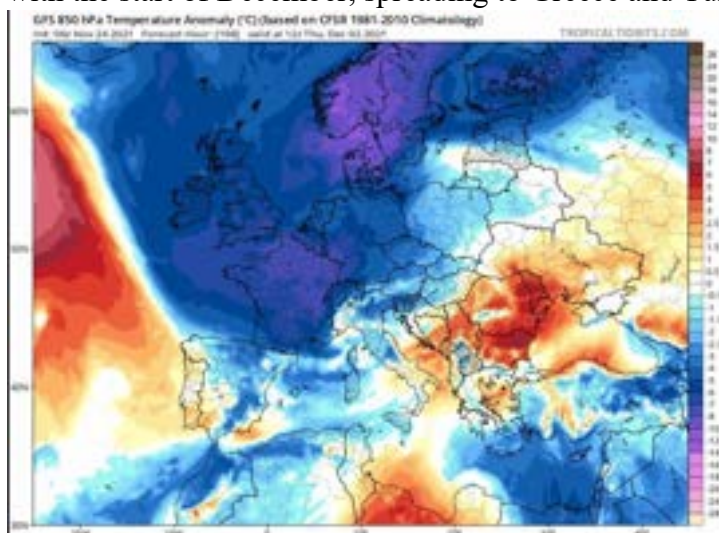
The multiple early freezes in Brazil this past summer are one. The record freeze in Texas last February is another. New record lows being set in the Antarctic are being ignored, as is its expanding ice pack. Having a more extensive and growing ice pack, plus colder temperatures, gives Antarctic Polar Winter blasts more power as they move north into South America, Africa, and Australia.



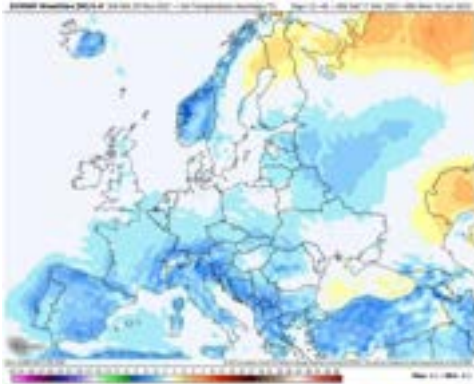
Australia has just seen its coldest November in over 21-years.



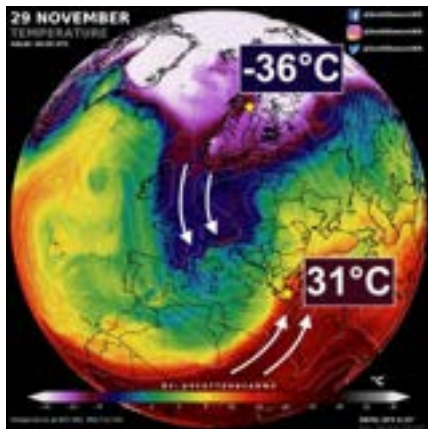
Bitterly cold Arctic winds coming to Scotland, Ireland, & England. The cold air will quickly spread to France and Spain and then to the rest of Europe on November 29. Another surge will push in with the start of December, spreading to Greece and Turkey by December 6.



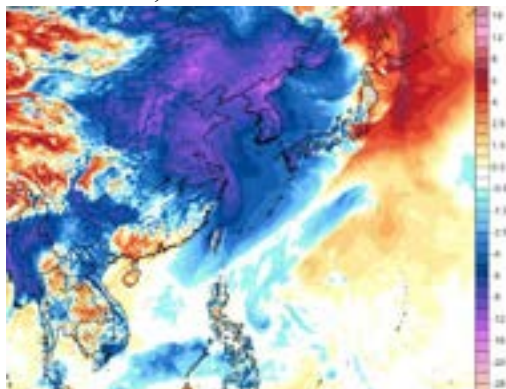
Below to much below temperatures is the forecast for Europe and surrounding nations into January 2022.



The temperature contrast across Europe the days in November was simply outrageous; 67C difference between Southern Greece and Northern Sweden.



Cold has been particularly hard on the Asian Continent. A strong, winter-like Arctic front hit in the last half of November. A total of 2.89ft of snow has accumulated in Shumarinai, Japan, the region's heaviest snowfall in recorded history (*for any month of the year*). In Nayoro City, Hokkaido, cars have been buried in 2-feet of snow, 4-times the normal amount and a new record for the month of November. Northern Japan's Hokkaido saw 2.53ft of snow in 24 hours in Shumarinai, the most since records started in 1981.





A rare, heavy November snow event trapped Brits in a Pub (*what luck*) for a 3<sup>rd</sup> night, as Arctic blasts engulf much of Europe. Yorkshire, England, and the Yorkshire Dales average 0.2 inches of snow in November. This year they are measuring it in feet, as the IPCC models apparently are not correctly calculating the development of atmospheric temperatures.



Summarizing what is currently occurring, Grand Solar Minimums continue to confound “Global Warmists”. Arctic Sea ice is approaching 10,000,000 km<sup>2</sup>, the 2<sup>nd</sup> highest ice extent of any of the last 15-years. The years 2005 & 2008 are on course to be eclipsed in the coming days/weeks. This means 2021 will soon claim the title of "The highest Arctic Sea ice extent of the past 2-decades". In addition, its extent is now comfortably above the 2011-2020 average, and by next week, is expected to also take out the 2001-2010 average, according to NSIDC data. This confirms that the Sun’s Grand Solar Minimums are now effectively cooling the earth. This trend is expected to continue for about 2-decades, if not longer. This shift has slowed global air currents, giving rise to greater volatility in weather, greater droughts, greater floods, greater variances in temperatures, earlier freezes, though more so in the Southern Hemisphere for now. And most importantly, warmer temperatures and higher CO<sub>2</sub> levels led to greater food production. A cooling planet leads to less food production and more likelihood of famine.

In our attempt to be as informative as possible, our Summary Analysis has become quite lengthy. To that end, we will use that as an excuse to write about #7 through #10 in a 2<sup>nd</sup> update to our TZC, to be issued in Q1 of 2022. There will be more interesting developments which will be addressed at that time.

Also, July22 charts were used for all 3-grains this year because we believe sales recommendations will be pushed to 100% for all 3-grains before July 01, 2022. Sales of 2022 grains should be made as we have detailed in the past.

When making sales of old crop grain, assuming those sales are being made because you see the price of that grain near its high or in its Upper Third trading range, you need to sell half that amount of your new crop production. This is a standard rule of thumb which generally

## **Conclusion**

We expect 2022 to be one of the more unpredictable years we have witnessed in decades. Government influences, which we have not seen in over 40-years, are in play. How much further they may extend we do not yet know. The push to create uncontrolled inflation continues and at its current pace, most project it to reach 10% in 2022. That alone can add an additional \$0.50 to corn prices and \$1.00 or more to wheat and soybean prices.

When you add expected Global fertilizer shortages to this equation, plus regional and/or national droughts, earlier-than-normal freeze events in prime agricultural areas, grain prices can do anything in 2022, especially in those grains that are already in short supply.

For now, we will leave you with some simple marketing thoughts.

No sales of corn and wheat. Those grains have higher highs ahead. The same would be true for milo/sorghum.

For soybeans, we know not everyone can or will sell any part or all of their 2022 soybean production today. We know some will not make any grain sales until their crops are harvested and in the bin. For those who use more tools to increase their profit potential, pricing 2022 soybeans remains our recommendation, while re-owning those dollars in July22 corn futures.

We would not be surprised to see the Nov22 soybean/July 22corn ratio move to 1.9:1 or less. It is currently 2.095:1. Last week it traded at 2.15:1. When we first made this recommendation, it was 2.273:1.

At 1.9:1, if the corn price remained unchanged, the soybean price would be \$11.13. If this ratio went to 1.8:1 and the corn price remained unchanged, the Nov22 soybean price would be \$10.55.

Even if you can not re-own any new crop soybean sales in July22 corn futures, it remains wise to move to 25% to 50% sold on new crop soybeans - by selling on price strength/rallies.

We will not rule out rallies in old crop soybeans above \$13.00 on weather woes in South America. We believe Nov22 soybeans will find it tough sledding from \$12.50 to \$12.90.