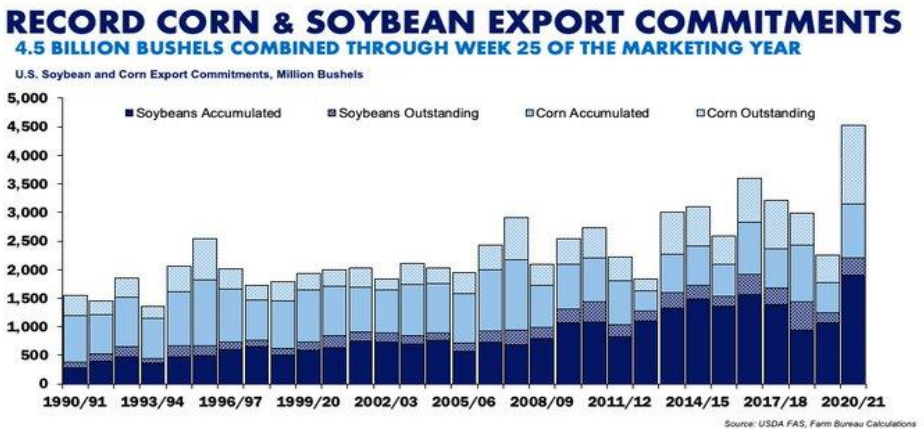
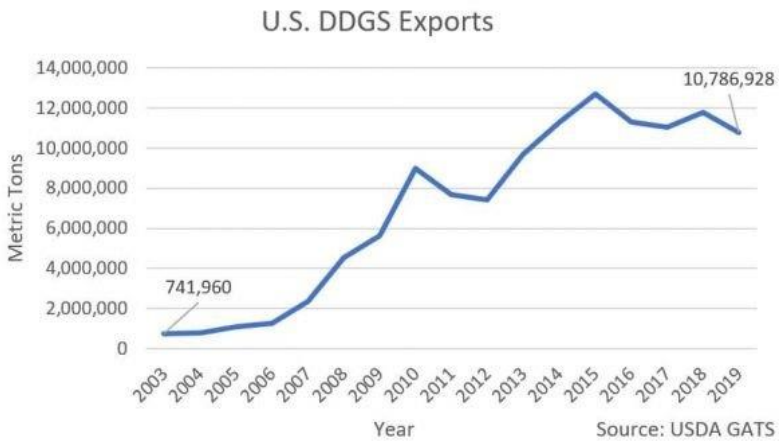
A weekly Cornbelt digest of marketing, economic, agronomic, and management information.

Commodity market price drivers—

- **The USDA says export sales** of corn and wheat dropped to marketing-year lows last week while soybean sales plunged. Corn sales to overseas buyers dropped to 17.8 mil. bu. in the 7 days that ended on February 18. That's down 55% from the previous week and 85% from the previous 4-week average. It's also the lowest point since the 2020-2021 marketing year began last September 1. Peru was the biggest buyer at over 6.3 mil. bu. followed by Vietnam and Japan. Unidentified buyers canceled shipments of just over 11.8 mil. bu. However, unshipped corn export sales are still a record of 1.372 bil. bu.—nearly triple compared to 487 mil. bu. last year. Wheat sales totaled 6 mil. bu., down 58% week-to-week and 67% from the 4-week average, the lowest level since the marketing year got started. Soybean sales to offshore buyers plunged to 6 mil. bu., 63% lower than the prior week and 72% from the 4-week average. The EU was the top buyer at 5 mil. bu. followed by Japan and Germany. Unshipped U.S. soybean export sales on Feb. 18 were 305 mil. bu.—up 73% versus 176 mil. last year. Export sales were weak across the board (except for cotton) as China was essentially absent due to their weeklong Lunar New Year holiday, and cold weather may have also played a part. However, China can be expected to return to the market at some point as it plans to have its hog herd back up to pre swine fever levels by June.
- **Despite the poor weekly export report**, there is better news. USDA's Foreign Agriculture Service released data indicated a record 4.5 bil. bu. total in corn and soybean export commitments with 1.4 bil. bu. of outstanding corn export commitments and export inspections. American Farm Bureau Chief Economist John Newton says those are trending in right direction (chart).



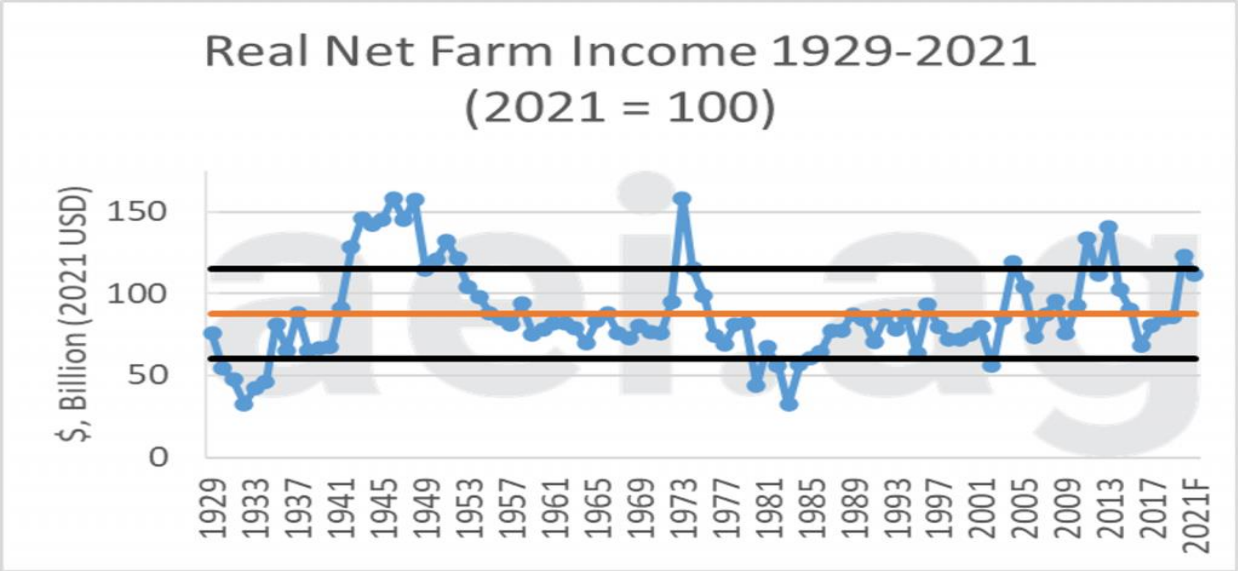
- **IL corn checkoff investment** in the U.S. Grains Council has helped build a robust global market for U.S. distiller's dried grains with solubles (DDGS) worth more than $2.24 bil. in 2019. IL Corn says, "This important market empowers ethanol plant profitability and maintains ethanol markets for corn, which consume 40% of U.S.-grown corn each year. As competition and volume have increased in the ethanol industry, DDGS sales have become an increasingly important profit center as well as a much-demanded feed ingredient by buyers across the globe."



- **China is (not so) patiently awaiting** the arrival of Brazilian soybeans, according to China's commodity news authority JCI China, which reports, "According to AgRural, 15% of Brazilian soybeans had been harvested as of late week compared with 31% a year earlier. Delays in planting, slow harvest and road congestion make Brazil's soybean export shipments lag behind. Brazil's soybean exports through this Feb have declined significantly from the same period last year and the line-up of vessels has hit a record high. Brazilian soybean shipments in March are important for China soy market. There are concerns about soybean shortages in Chinese market in Mar and Apr. In 13 business days as of February 21, Brazil exported 45.9 mil. bu. of soybeans. Daily exports were only 3.5 mil. bu. compared with 9.9 mil. bu. a year earlier. There are only 5 business days left in this Feb. It is indisputable that exports in this Feb will be far lower than the same period last year. If Brazil's soybean exports are less than 110 mil. bu. in Feb, Mar exports are hard to reach market estimated 330 mil. bu. There are concerns about soybean shortages in Chinese market in Mar and Apr. Traders estimated that China's monthly soybean imports may be 228 mil. bu. on average in Feb and Mar, 257 mil. bu. in Apr and around 220 mil. bu. in May."

Ag Economy—

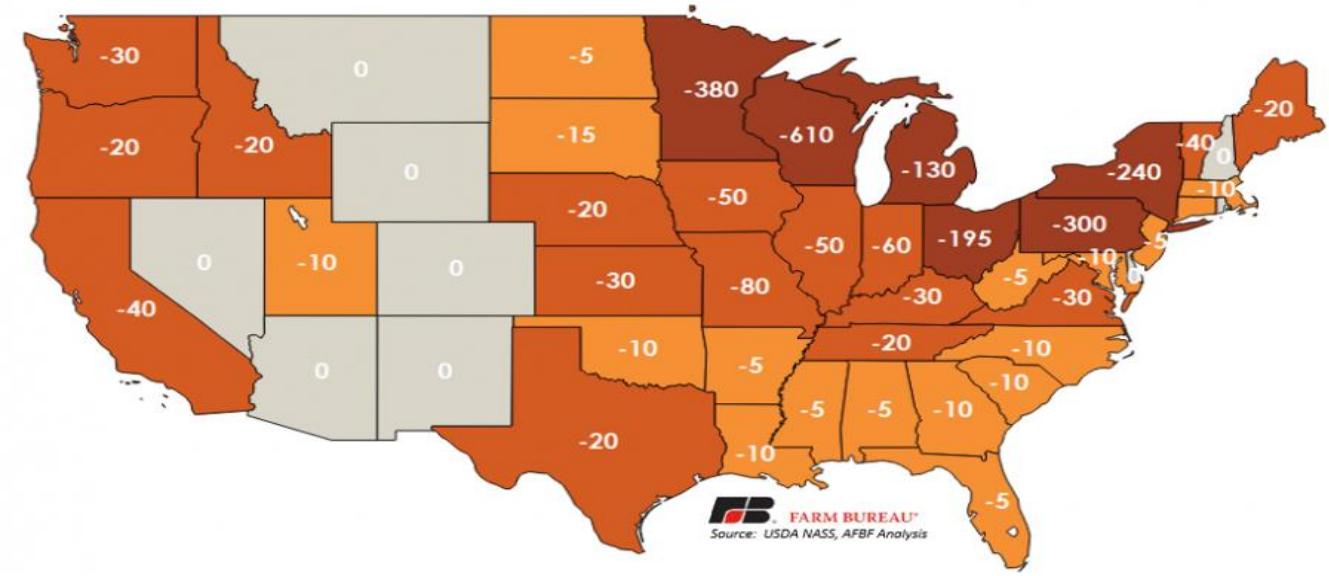
- **While many economists say** farm income will be falling in 2021, Purdue economist David Widmar says it will rise if it is adjusted for inflation. 92 years of inflation-adjusted net farm income estimates and provides a great deal of context. At $111 bil., the USDA's early estimate for 2021 is well above the long-run average of $88 bil. (in orange). Furthermore, 2020 and 2021 estimates are among the highest observed throughout history. For example, net farm income in 2020 was an estimated $123 bil., which is the third-highest inflation-adjust observation since 1970. And Widmar says there are other economic "take homes."



- ✓ While farm payments are likely to tumble in 2021, they will remain historically high. At nearly $25 billion, ad hoc payments from the December 2020 stimulus bill Congress passed will count toward 2021 totals. Additionally, the USDA estimates more than $5 billion in PLC payments will be made in fall 2021 (for 2020 production).
- ✓ While the value of crop production increased 9% in 2020, the value of animal production fell 6%. More broadly, the value of animal production in 2020 was also the lowest level since 2010. While heading in a favorable direction, livestock production will remain near decade lows as crops approach the highest levels since 2014.
- ✓ While many have noted corn and soybean prices have jumped to the highest levels in many years, it's not just commodity prices that are contributing to the improved income outlook. Overall, production expenses are at considerably lower levels than just 5-10 years ago. While production expenses across the entire farm sector are expected to increase slightly into 2021, they will remain 19% below the 2014 highs.
- ✓ The implications for 2021 net farm income are that conditions will certainly change, and it's not clear which way those changes might occur. Don't be surprised if the 2020 estimates adjust significantly as a result of these data. Furthermore, keep in mind the 2021 data will be updated and revised for the next 18+ months.

- **There are about 32,000** licensed dairy operations in the US, less than half of the number that existed in 2003. USDA's NASS released its month Milk Production Report last week showing the decline, due to depressed prices, COVID's impact on milk markets, depooling of the Milk Marketing Order, volatility in cheese prices, and other negative disincentives for being a dairy operation. Farm Bureau economist Michael Nepveux said milk production rose from 2019 to 2020 as milk to feed price ratios were friendly, but with corn and soybean prices increasing last August, margins have been lost with milk prices on a downward trend. Nepveux says long term herd expansion is like to reverse and shrink this year, since fewer dairy heifers were being retained in the latest cattle inventory. But there is another important statistic. "Unlike the fluctuating overall number of cows, milk production per cow has steadily increased approximately 11.5% from 2011. In 2021, USDA predicts that daily output per cow will increase nearly 1.7%, which would be the highest rate of growth since 2014." And he adds, "report also showed the fourth-largest year-over-year decline in the number of licensed dairy operations in the last 15 years, and the second largest (right behind 2019) year-over-year percentage decline since 2003, the first year for which the data is available." Gray shaded states were steady with no losses, but no state recorded a gain.

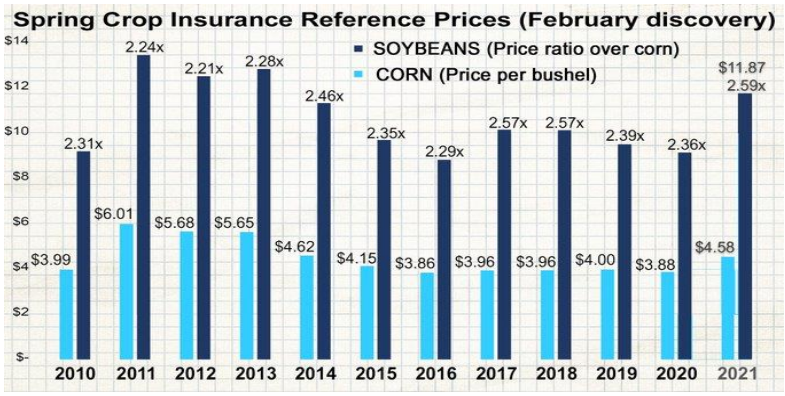
Figure 4. 2020 YOY Change In Licensed Dairy Operations By State



Farm Business—

- **If you want a bigger profit margin**, cutting certain tillage expenses may be the way to achieve that, say advocates of Precision Conservation Management. PCM has been promoted in some IL counties for 6 years by the IL Corn Growers, but a new partnership with the IL Soybean Association has allowed that to expand to more counties this year. And both organizations have staff members to provide individual help. The popularity of the program is anchored in the confidentiality of expenses for individual operations, but participants can see overall reductions in expenses from other participants. For more information visit with the staff members at Precision Conservation Management. And farmers who participate in a carbon capture incentive program may have a pleasant surprise combining the 2 programs.

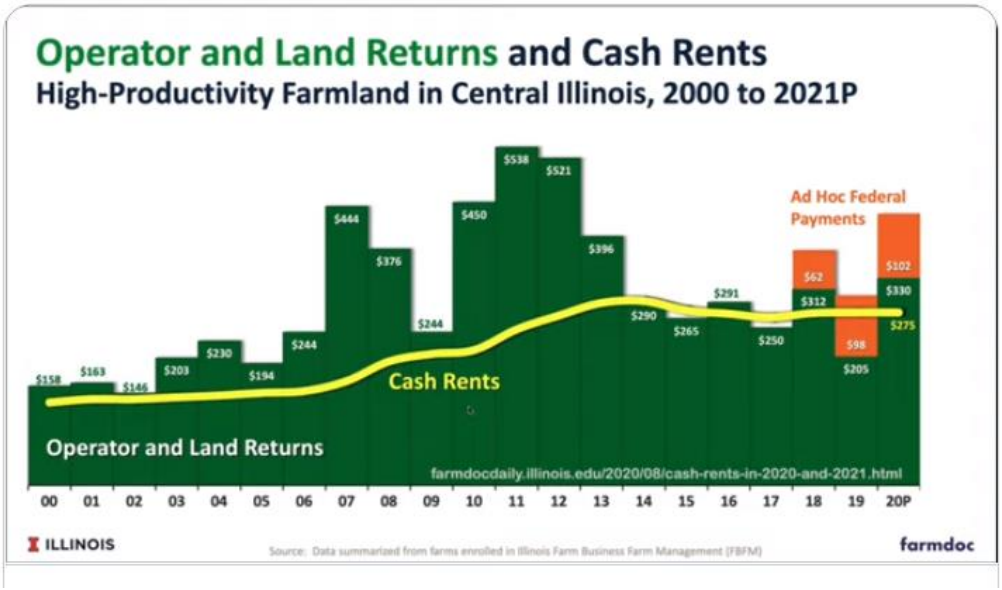
- **Thanks to China's interest** in loading up US corn and soybeans, your crop insurance price guarantees for 2021 crops are the highest in many years. Although that is a double-edged sword because of higher premiums, most farmers and lenders will look at the guarantees with a smile. Not since 2014 has the corn guarantee been near the $4.58 that 2021 corn crops will have which are insured with a revenue protection policy. An 85% revenue protection policy sets a floor price guarantee of $3.89 should your yield or market prices crumble during the year. For soybeans, the spring guarantee is $11.87, some $2.70 above the 2020 guarantee and the highest since 2013. But with the higher guarantee comes a higher cost. You will want to check on what that level of guarantee will do to your outlay for crop insurance premium payments for the year. Your crop insurance agent should know sometime this week. It can also be found in the IL Premium Calculator tool, found on the Farmdoc website. If you want to lower your premium cost, with a lesser level of coverage, and want to know what payments might be expected, consult with the IL Crop Insurance Decision Tool, which has data updated as recent as Feb. 25.

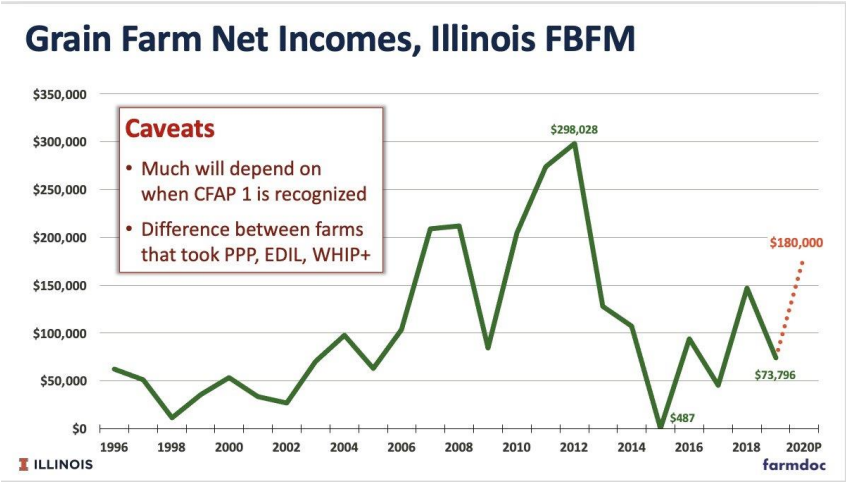


  - ✓ **As an extra added attraction,** IL ag economist Gary Schnitkey and colleagues have created another decision tool for the crop insurance add-ons of Supplemental Coverage Option, and Enhanced Coverage Option. That tool will estimate payments if you want to pay the higher premium cost of ECO in return. Schnitkey and company say, "Since ECO coverage levels are high, ECO will make payments in many years. Given premium support involved, ECO should average higher payments than farmer-paid premiums over time. However, in any given year, a payment may not occur, and the farmer will still have the premium outlay. The decision to take ECO likely will come down to how much farmers desire to pay for crop insurance premiums. In particular, the ECO premiums at the 95% coverage level are high relative to the profit expected from an acre of corn. ECO can be used in conjunction with Supplemental Coverage Option (SCO), which provides protection from 86% to the underlying RP policy's coverage level. ECO at the 90% coverage level (ECO-90%) will hit its maximum payment when county revenue as a percent of expected revenue is below 86%. In this case, the entire protection offered by ECO-90% will be triggered. When harvest price is at or below the $3.50 projected price this maximum payment is $36 per acre, which occurs through some combination of low yields and low prices. At a $4.50 harvest price, the maximum payment occurs for county yields at or below 180 bushels per acre." ECO-90% has about a 50% likelihood of making a payment each year. Over time, the expected payment from ECO-90% will average about $6.30 per acre. Over time, farmers should expect to receive $16.30 per acre and pay $10.38 in premium, for an average return of about $6 per acre. However, about one-half the time ECO-90% will not make a payment. →

- ✓ **If you are considering any changes** in your crop insurance program, make sure your agent knows before March 15. He or she will continue your 2020 program for 2021 unless you alert them of any modifications such as a lower level of coverage or adding the ECO option. If you are planting new acreage or have picked up a new farm, ensure your agent knows by March 15 that coverage is desired there as well. There is no point committing to more cash rent without the crop insurance guarantees.

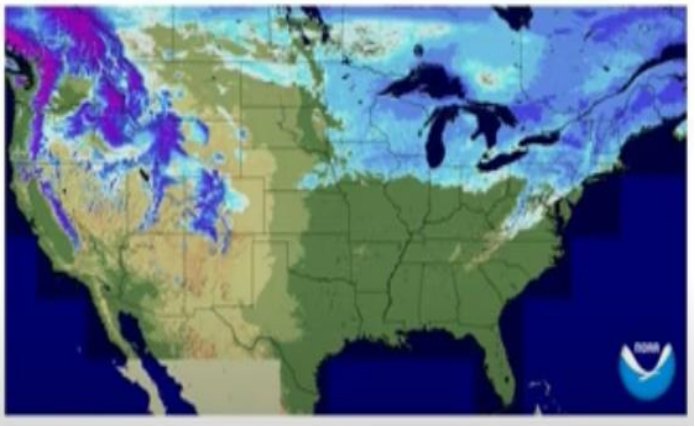
- **What did *ad hoc* federal payments** do for your 2020 income? Most farmers are looking at bottom line numbers indicating the payments erased a lot of red ink along with higher grain prices. IL ag economists reported in a Thursday webinar that farmer returns on highly productive Central IL farmland saw $204 per acre with the payments, versus a $147 per acre return without the payments. The bottom line is that the *ad hoc* payments allowed cash flow in 2019 even with high cash rent and formed the basis for substantial profitability in 2020. For 2021 the IL ag economists offered a baseline budget with $275 average cash rent and current fall bids that points to substantially lower overall farm return without the help of federal payments. For a Central IL farm that means a return to operators of $67 per acre on corn and $166 for beans. That would be a $117 per acre return for a 50-50 crop rotation. However, that still is more than the crop returns alone for 2020. Keep in mind those prices are based on current CME prices for fall delivery, which are more volatile than usual, and could decline. In fact the Farmdoc price distribution tool indicates there is a 30% chance of Dec corn expiring at less than $4, and a 37% chance of Nov soybean futures expiring below $11.25.

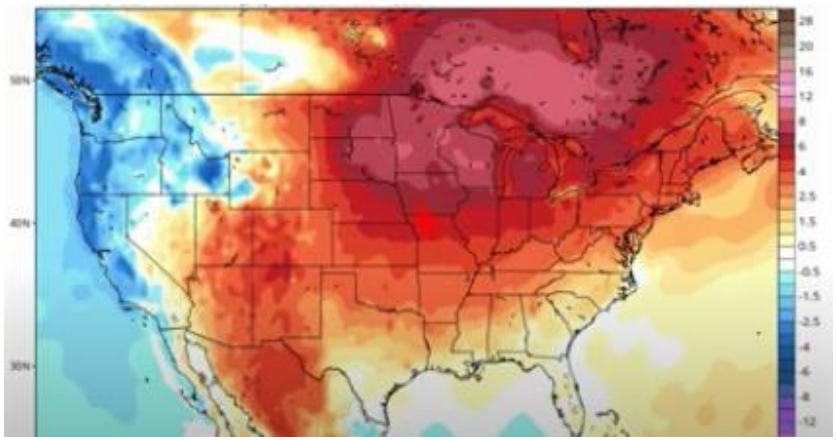


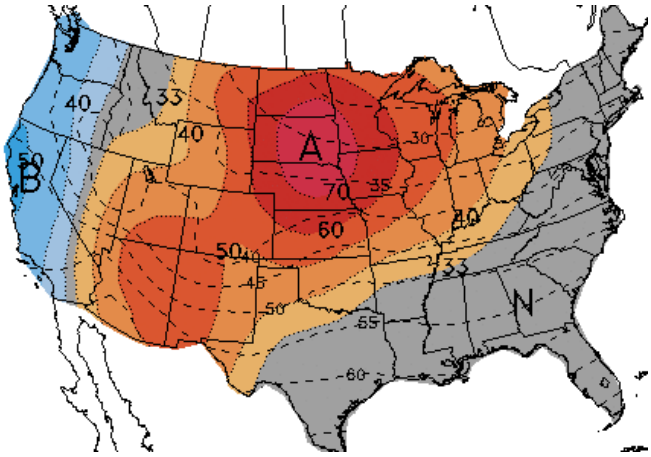


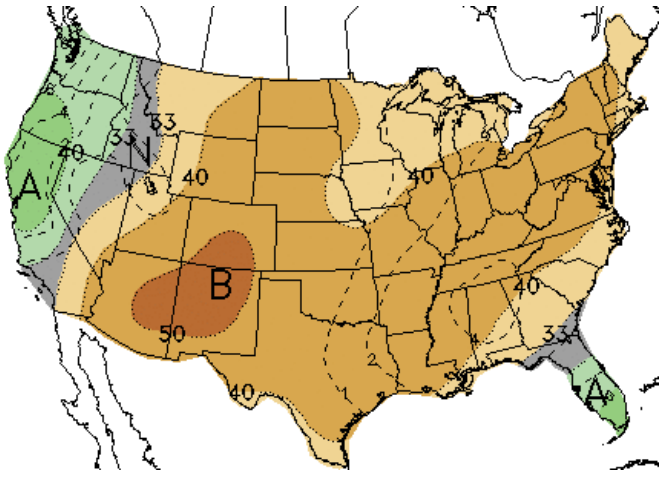
Weather—

- **The snowmelt season is upon us**, but the spring flooding season may not be that serious, according to Blue Water Outlook. The Missouri River Watershed (NE, SD, ND) is unusually devoid of heavy snowpack and the light snow depth in the Mississippi watershed is gradually melting around the edges (IL, IA, MN), all thanks to warmer than average temperatures during the past week. So far there have been no significant heavy rains that have melted the snow, sending large volumes of water washing though fields to local streams and overpowering tributaries of the major rivers. Springtime river levels are expected to be near normal, with flooding potential only where they typically flood. However, there is no serious widespread flooding threat at this time. Heavy rains forecast in the southeast and east coast will not be a factor, nor will light snows expected over IA. Wherever snow may be across the Cornbelt will rapidly be used up by significantly higher temperatures (left) overspreading most of the nation going into early March. The 6-10-day forecast calls for warmer temperatures (left) and generally dry conditions (right).

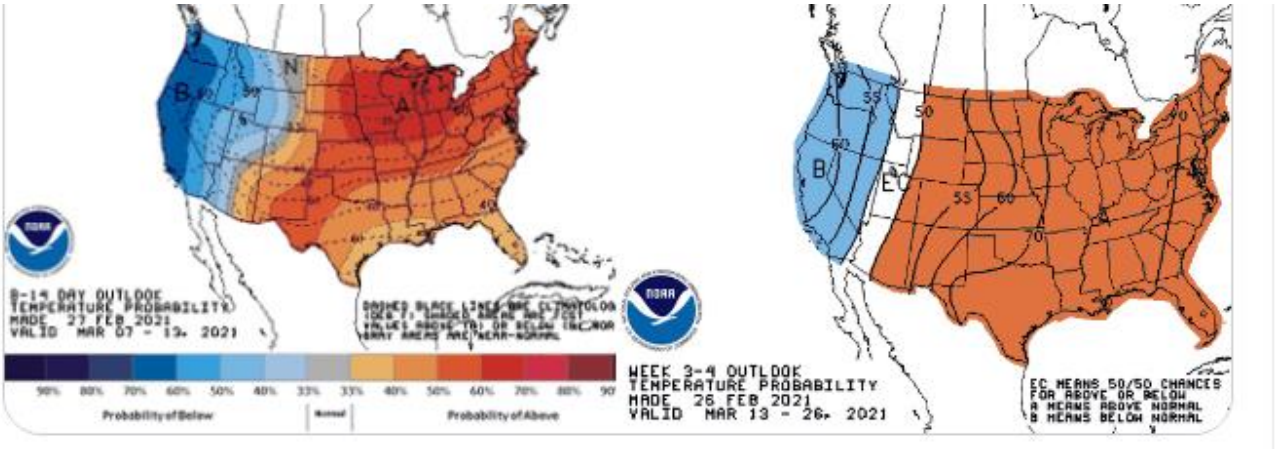




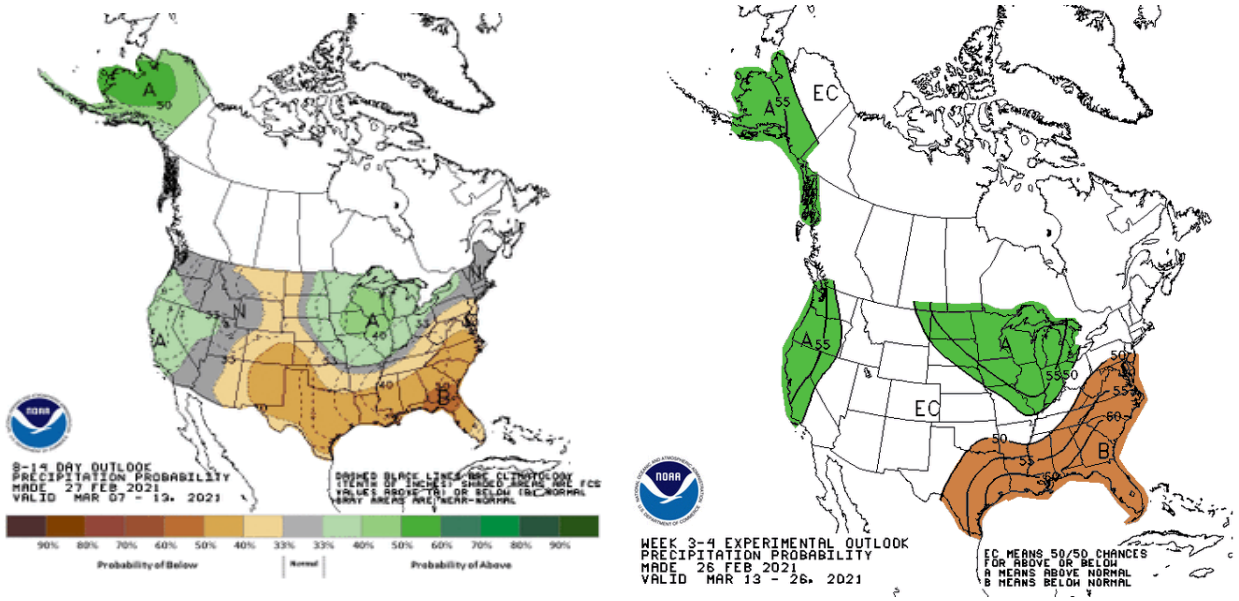




- **Are you planting corn or soybeans during March?** Dennis Todey, director of the Midwest Climate Hub for USDA provides a strong case for an early spring and warm soils for an early start to the 2021 planting season (below). He says, "Very little chance of cold coming into March. Week 2 (left) and week 3-4 products (right) suggest higher probabilities (of) warmer than average. Will work quickly on removing snow and warming soils. Concerns about pushing perennials ahead before last freeze - will have to monitor.



Regarding precipitation, Todey says there are, "Some better chances for precipitation in north central US into March. Helpful for drier soils and areas on the Drought Monitor map. Have to monitor amounts for any slowing in crop progress. Not a concern yet and helpful for drought areas."



Todey deferred to the Climate Prediction Center, which released its latest March forecast this weekend. It says, for March 5-11, "Chances are increased for above-normal temperatures, while best chances for a wet period are across the Middle and Upper Mississippi Valley." And for the period of mid to late March, "High confidence exists for the chances of above-normal temperatures during mid- to late-March stretching southward from the Great Lakes through the Gulf Coast."

Climate, Conservation, and Environment—

- **The tone is set** on the climate change debate in the House Agriculture Committee, and it took place during the committee's first hearing.

Committee Chair David Scott, D-GA, (right) says changes in weather patterns bring serious risks to production agriculture, forest resources, and the overall economy. He says, "These risks cannot be understated." He also says the USDA's Economic Research Service notes that climate change will likely affect risk-management tools, financial markets, and America's global food security, as well as many other areas. Ranking Member G.T Thompson, R-PA, says agriculture has been on the menu when it comes to climate change, noting that last week's hearing now puts agriculture at the table. The Hagstrom Report says Thompson wants to be very clear on his position, which is that "The climate is changing, the Earth's temperature is rising, and I trust the science that global industrial activity has contributed to the issue." Thompson says we should be reducing global emissions because it's the right thing to do. "It requires smart science-based policies," Thompson adds. "But the apocalyptic narrative of the world coming to an end within a decade is not evidence-based and isn't supported by science."

- **Secretary Vilsack spoke with the media** Thursday, following this week's Senate vote to confirm his nomination. Vilsack says President Biden has a vision of a net-zero emission U.S. agriculture, adding, "I think it has the capacity to fundamentally change U.S. agriculture in a positive way and create new revenue sources." However, he says that work won't happen in a single administration but added "the work has to begin." Vilsack planned to meet with the USDA climate team Friday. Vilsack says USDA's role will be to provide technical guidance to lawmakers and the administration in crafting climate policies.
- **Climate and conservation** were among the top priorities of American Soybean Association delegates as they created 2021 policy resolutions. President Kevin Scott says, "Throughout this year's document, we recognize the role that climate and conservation will play in policy discussions in 2021; from thoughtfully addressing development of public and private ecosystem services markets to promoting precision agriculture technology as a tool to improve environmental stewardship while providing economic returns to growers," Scott says. The many resolutions they approved include Trade Promotion Authority reauthorization, a sufficiently funded Commodity Credit Corporation account to ensure timely benefits for farmers, and a strong farm safety net and crop insurance program, including expanding support for double-crop soybean coverage. They also want to see the development of voluntary carbon markets that incentivize agricultural conservation and significant increases in rural infrastructure funding."

- **The Agriculture Energy Coalition** recently announced its 2021 policy recommendations. Those priorities include providing the USDA Rural Energy for American program at least $2.5 bil. over 10 years, including a financial infusion upfront and increase to 90% REAP Loan Guarantee for any loan amount under $1 mil. They also seek to extend clean energy tax credits, provide USDA with additional rural development funding and authorize and modernize the Biorefinery Assistance, Renewable Chemical and Biobased Product Manufacturing Program. The recommendations also include modernizing the Advanced Biofuel Payment Program, increase funding for the Bio-Preferred program, and make sustainable aviation fuels a priority for USDA. The coalition says USDA Should prioritize the role of biomass in forest management and wildfire risk reduction. Finally, the group asks USDA to consider using the Commodity Credit Corporation to support low carbon renewable energy innovation. The Agriculture Energy Coalition represents a diverse set of interests in agriculture and renewable energy, such as farmers, advanced biofuel and bio-based manufacturers, clean-tech, rural lenders, and environmental NGOs.
- **As the US re-enters** the Paris Agreement and companies all over the world work to become carbon neutral, the idea that farmers can help out by storing carbon in their soils through conservation tillage, cover crops, conservation reserve practices like grass waterways and riparian zones, and in their corner woodlot has suddenly become a "thing," says OH St. environmental specialist Brent Sohngen. "Several companies have popped up to manage the process of quantifying and selling the carbon, and real money is being exchanged. Right now, forests and agricultural lands in the US offset about 12% of our gross carbon emissions (773 million tons of CO2 per year), so as a country, we could say that we are about 12% carbon neutral. Right now, the most efficient process for removing carbon dioxide from the atmosphere is photosynthesis, or growing plants. Today, if a company wants to reduce their net carbon emission by 1 ton, it's cheaper for them in most cases to pay a farmer to store carbon in soils or a forester to store carbon in trees than it is to deploy or buy new renewable energy. As a result, many of the world's largest companies are trying to contract landowners for the carbon they can generate now. The price thus is relatively modest, around $10 per ton CO2, which translates into $10 per acre for conversion to no till, or $30 per acre for conversion to trees. This price will probably increase in the next couple years. If someone practicing no tillage decides to do some light tillage, lots of the stored carbon is emitted and that will eliminate most of the benefits of storing it. If you are a typical corn and bean farmer in Ohio with no animals, you emit about 0.25 tons of CO2 equivalent per acre per year. If you switch to no till entirely, you sequester about 1 ton CO2 per acre per year. For a 420-acre farm, that's 105 tons up in the air, and 420 tons back in the ground, for a net of 315. Any tons removed from the atmosphere will help slow down climate change. It's as simple as that."

Fortress Bank has been an agricultural bank going all the way back to it's 1904 roots in Burnside, Illinois. We have a passion for helping farmers and farm businesses grow and prosper and, unlike some lenders, our commitment to agriculture is unwavering. We urge you to check out our website at www.bankfortress.com, send us an email Solutions@bankfortress.com, or give us a call at 217-659-7776 or 217-357-3112.