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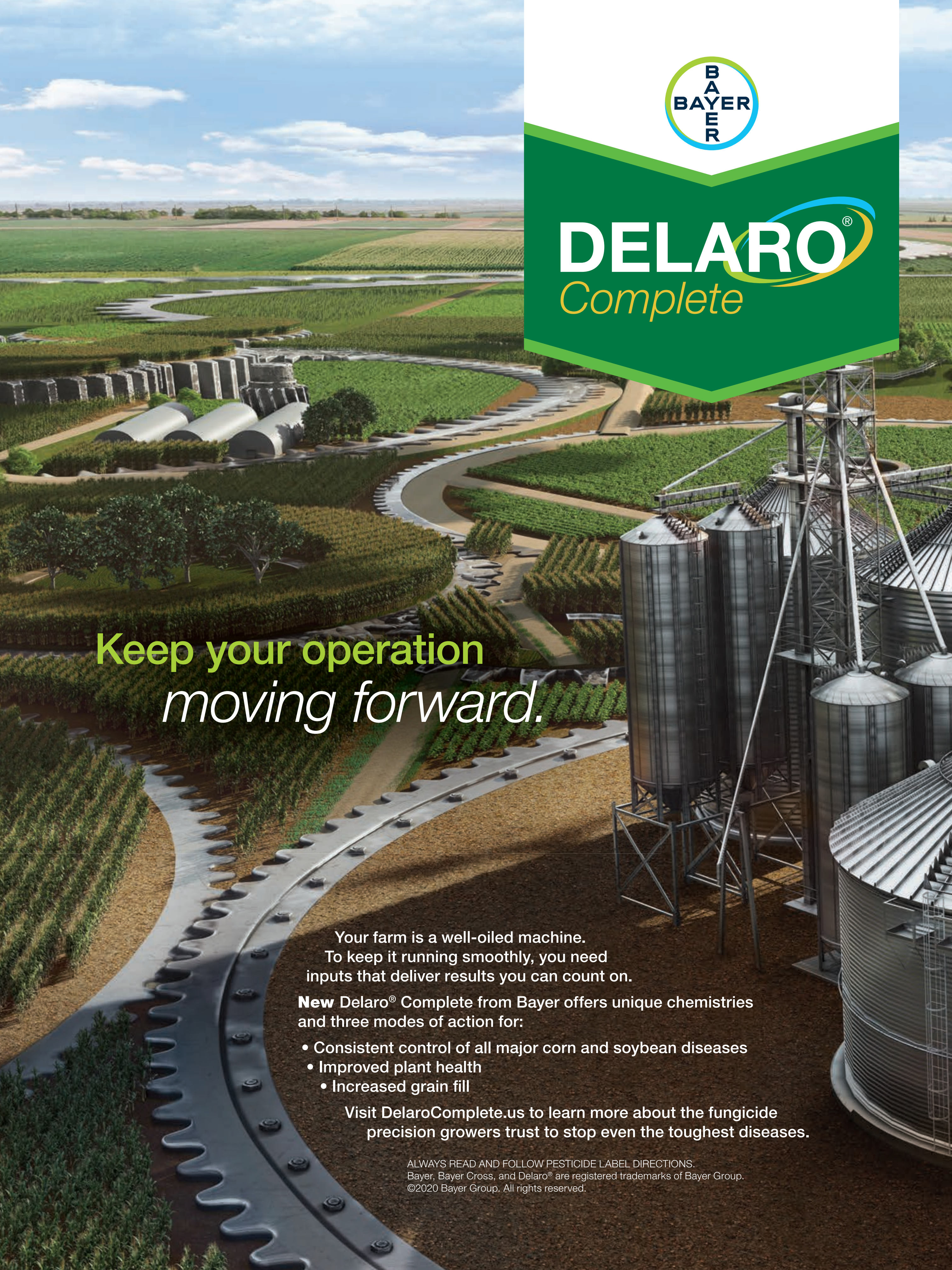
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FARM STRONG

Even when the load is heavy, America's farmers and ranchers continue to look ahead fueled by optimism and resiliency.

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DES KELLER

SPECIAL ISSUE

STRATEGIES TO BUILD RESILIENCE

ABOUT THE COVER: Travis and Sarajane Snowden ranch in Routt County, Colorado, where their roots run deep, and support from family and friends help keep them strong. Land prices here in the heart of the Rocky Mountains are a huge challenge for anyone thinking about expansion, but the couple says their love of agriculture and the region, along with phenomenal grass for their 450 cow/calf pairs, are why they call this little slice of heaven home. COVER PHOTO BY JOEL REICHENBERGER

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IT TOOK A PANDEMIC TO GIVE AG ITS DUE

Victoria G. Myers
Senior Editor

➤ Write Victoria G. Myers, 2204 Lakeshore Dr., Suite 415, Birmingham, AL 35209, or email **vicki.myers@dtn.com**.

It's been a few generations since the average American knew, or for that matter cared, who their local farmers and ranchers were. This year, for the first time in many people's lives, grocery store shelves and meat counters were empty as COVID-19 disrupted supply chains across the nation.

People started to think about farmers. They started to think about ranchers and anyone with a flock of layers, a herd of milk cows, poultry or hogs. And, no big surprise here, they started to look for ways to connect. These consumers drove their shiny cars out of town, down a few dusty roads, all to find their nearest farmer. They came to buy food for their families. No middleman. No buying clubs. Just one on one, buying from the guy who grew the sweet corn and vegetables, who raised the livestock, who milked the cows or gathered the eggs.

Funny thing, no one seemed to care back in March if that side of beef was organic or grass-fed. They didn't worry if the chickens that laid their eggs were free-range. For a moment, all the marketing mantras in the world didn't mean a thing.

More than that, farmers were no longer faceless cogs in some industrialized system. Farmers had names, they had families, and they felt like friends now, because they cared if you could feed your kids. They were willing to share, to help. While the rest of the world panicked, they followed the seasons and let nature dictate what they would do rather than some cable news channel.

They tilled the ground, planted for the harvest, put the bull in with the cow herd and showed a faith that reminded those new friends, the ones who drove out and met them for the first time, that agriculture has a face, a heart and a near limitless amount of strength and resiliency.

Victoria G. Myers

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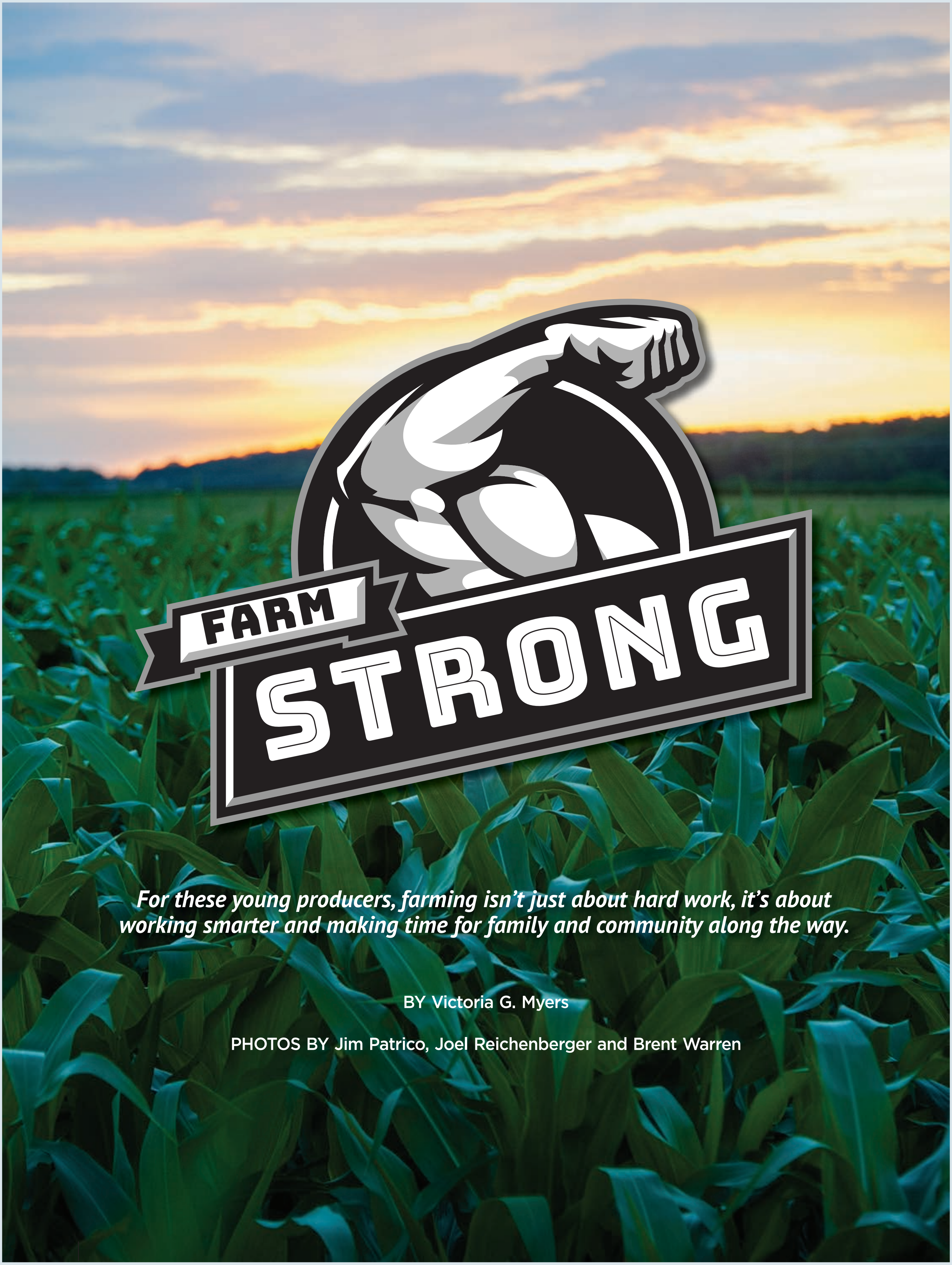

KURT LAWTON

FARM STRONG

For these young producers, farming isn't just about hard work, it's about working smarter and making time for family and community along the way.

BY Victoria G. Myers

PHOTOS BY Jim Patrico, Joel Reichenberger and Brent Warren

AIMEE BISSELL

→ Bissell Family Farms

→ Bedford, Iowa

→ Corn, Soybeans

SEEDS OF UNITY

Midwestern agriculture isn't all spreadsheets and profit margins. It's about future generations, shared community and knowing what really matters.

The road to a true family farm hasn't always been a smooth one for the Bissells. Both Aimee and Klint Bissell come from a long line of Midwestern farmers, but that didn't give them a leg up when it came to finding land to farm. They literally started from the ground up to reach the 5,500 acres they work today. It's been a journey that, at times, felt divisive, Aimee says.

"Klint rented his first farm when he was 14, so he knew this was what he wanted from an early age. I am a registered respiratory therapist. I didn't understand why he couldn't just shut down his work and leave it to tomorrow. I felt we were living separate lives and just coming together in the evenings."

Aimee joined Annie's Project, a program that educates farm women and helps them network and become better business partners. What she learned was life-changing. By 2013, she had joined the farm as a full-time operator.

"I wanted to show our boys this is something they can strive for. I wanted this to be a family farm in every sense of the word, including planning for the possibility that the next generation would want to come back and work this ground."

AIMEE BISSELL

That next generation, Braydon, 17, and Tucker, 13, took on some heavy responsibilities this year, as a pandemic changed everyone's plans. This was the first year they were home during planting season. Braydon took over running a sprayer, and Tucker air-drilled beans.

"These role changes, which we hadn't anticipated, were an opportunity for growth. Without the challenges of 2020, they wouldn't have happened," Aimee explains.

Another upside? Zoom meetings. "I've attended more meetings this year than I ever have in my life because they are so accessible," she says.

As much as she loves the family unity that's a daily part of the farm today, Aimee admits she also likes a little "me time." She usually finds it behind the wheel of a combine this time of year.

"I can drive the heck out of that combine; it's my happy place," she says smiling. "I listen to audiobooks. It forces me to take a break, just pick corn and relax." ➤

WORKING SMARTER LIGHTENS THE LOAD

Technology, diversification and family are the keys to success for this Southern operation.

Seth More is harvesting soybeans and talking about the farm he's on today. "The people we bought this land from said they could run four or five combines all day and wouldn't fill a truckload with beans," he says. "We fill a truck using one harvester in 20 minutes. That just shows you how much things have changed in Southern agriculture. It shows you what technology is capable of."

Seth and his brother Jesse rely on that technology to help them manage 10,000 acres, 4,000 of which are in corn and soybeans, this year. And, as important as it is, Seth says technology is also one of their biggest ongoing challenges.

"Everything is changing so fast. What I thought I knew two years ago is old. Companies keep changing, updating. I honestly don't feel I've been able to catch up to it," he says.

Technology has also forced dramatic changes in the availability of farmworkers who can handle an increasingly complex job. "You can't just grab someone off the street to do farm work anymore," Seth explains. "To work in agriculture today, you have to be computer literate. That's one reason you see more operations like ours adding partners. We need people we can count on. My brother, Jesse, came in as partner a couple of years ago to help."

SETH & JESSE MORE

→ Dee River Ranch

→ Aliceville, Alabama

→ Corn, Soybeans, Cover Crops, Cattle

There's more to farming than technology, though, even in 2020. There's adapting to the land and finding ways to improve the odds of success. Here in Aliceville, that means a lot of diversification and, at times, making extra trips across the field to pinch pennies on nitrogen applications.

This year, Seth notes they decided to split nitrogen applications on corn into thirds. The strategy paid off, as heavy rains plagued the operation throughout the year. The erodibility of this sandy land is always top of mind, and it's one reason they plant cover crops across all of their row-crop acreage. They also keep CRP (Conservation Reserve Program) land, timber and grasslands, and run a commercial Brangus herd and produce hay.

It's a lot of work for a few people, but Seth says family is the thing he knows he can count on to work it all out. "My wife, Jodie, is a big part of my success," he says. "We rely on our families, and we know they are counting on us. That really matters when times are tough." ➤

CHRISTI BLAND

→ CMB Farm
→ Sledge, Mississippi
→ Soybeans, Rice

HAVING CHOICES IS THE KEY TO BALANCE

Irrigation tips the scales when it comes to better and more consistent returns for this solo operator.

Bigger is not necessarily better when it comes to farming. Christi Bland's row-crop operation has taught the fourth-generation producer that what really matters is being able to water a crop. "It's not even so much about the quantity of the land you farm," she says. "If you have the ability to water, you can make a difference in yields."

Bland rents about half of the land she farms today and says while she loves farming, a huge operation has never been her goal. Rather, she says, "I stay focused on making the land I have the most profitable it can be."

This year, Bland stayed with soybeans and rice, noting she wanted to include some corn, but the weather didn't cooperate. She'd like to get back to wheat after a 10-year hiatus from the crop and notes the market is finally priced to encourage her to move in that direction.

"I really think diversity is important," she says. "When we see trade wars and their effect on our commodity markets, I always think how important it is to have choices. I like rice because it is more of a guaranteed crop. But, at the end of the day, you need to rotate for soil health. It's all a balancing act."

CHRISTI BLAND

Bland adds when she started farming, she found the marketing side of the business frustrating, because there was so little control over what happens there. Today, she believes technology is one way to have more control as a farmer. "I think it has potential to minimize risk," she notes. "But, when you see the price tag associated with it, it can be startling. You have to consider whether it's going to give you a return on the investment."

Farming's challenges, Bland adds, are nothing new. She says her dad, James, has seen the same ups and downs she struggles with today.

"He was driving tractors when he was 10 years old," she says. "I wish I had that kind of time in. I think the biggest difference between his generation and mine, aside from technology, is this idea of sustainability." They are already making plans for the next generation by utilizing tools to help measure progress. "The key is working hard, focusing on the variables you can control and letting God take care of the rest." ➤

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FARM MATH GETS HARDER TO SOLVE

Equipment prices are up, land is hard to find, and farm labor has become the unicorn of agriculture.

JOE MORKEN

→ Morken Farm

→ Casselton, North Dakota

→ Sugar Beets, Soybeans, Corn

One combine is what it takes to do the job at Morken Farm, so one combine is all there is for this 3,400-acre operation. Thinking about a second one just creates more questions than answers for Joe Morken.

"At what point do you get to where you need that second combine?" he asks. "If we pick up another quarter, do we need one? What happens when your only machine breaks down? A lot of the evaluations we do when we consider profitability are around maxing out equipment use."

Land availability plays a key role in that decision. Morken says they own about one-third of the land they work and rent the rest. "The competition for land here has gotten more intense," he says. "It all comes down to who is paying what for an acre of ground. Downturns in the market have flushed out some of those top-dollar renters in our area. Still, we are looking at a situation here where the average farm is bigger than it used to be, and we balance that desire to grow with the question of whether or not it makes financial sense."

Timing is key, but so is labor. Morken believes farm labor may be the single most important limiting factor to growth for most operators. "The labor challenge only grows as you try to move the operation up in size. You go from where a couple of seasonal workers is enough to needing full-time people. And, you aren't looking so much to fill a physical labor job anymore. In my grandpa's day, it was a horse and a two-cylinder. It was easier to fill farm-labor roles, because it was really about brute strength. Today, your help has to be tech savvy. They need to understand GPS. It takes a different kind of worker, a skilled worker."

One way Morken tries to balance the bottom line is by diversification. He grows sugar beets on shares on about 300 acres. But, that's just part of the solution to a complex problem.

"Sugar beets are the one specialty crop we produce now; but in the past, we've grown wheat, navy beans and even some food-grade soybeans. We pencil it all out every year, and we watch our costs. It's not always easy to work it all out, but being willing to try new things helps." ➤


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KAYLA & MATTHEW POE

- → Poe Farms
- → Pontotoc, Mississippi
- → Corn, Soybeans, Cotton, Timber, Cattle

BALANCING ACT

It's always good to have acres, but this couple makes a living on a lot less thanks to a spirit of innovation.

MATTHEW & KAYLA POE

There's not much a couple thousand acres of Southern ground can't grow. The secret is knowing exactly where to put what. Cattle and timber can work on poorer hill ground, while traditional row crops like corn, soybeans and cotton need more quality soils. The mix is a recipe for diversity that helps Kayla and Matthew Poe's family farm flourish.

"We aren't doing this for show," Kayla says. "This is what we want to do. We love farming, and we want to raise our kids in it. We're here for the long haul."

Word spreads when you think like that. Kayla says the last two blocks of land they've added came word-of-mouth. "People hear we are taking good care of the land, and that means a lot in our circles," she says.

Making ends meet isn't all about the crops, though. Matthew has a knack for keeping older equipment running, and sometimes he purchases used equipment he can fix and resell. It's one more income stream.

"It all works together," Matthew says. "On crops, when one is down [in price], usually one is up. The more income streams, the more you're spreading risk. That's one reason we like cattle. You generally know how many calves you'll have to sell every year, so that helps balance things out."

Kayla is eyeing that commercial cow/calf business with thoughts of turning it into something more. "We are looking at selling beef direct to consumers in our area," she says. "I'm not necessarily thinking a branded program, but we've seen others be successful at selling sides or quarters to people in the community."

An increase in consumer direct sales is one positive coming through the pandemic. But, the downsides have been especially challenging for the young family.

"A lot of our meetings have moved to Zoom, and we really hate them," Kayla says. "They are so impersonal."

Matthew adds he misses spending time with mentors. "COVID has really hurt that," he says. "There are older guys I can always call on for help. One friend of mine is in his 70s, and he calls and checks on us, drives by to check the crops. I need to be around people like him, because they help keep me moving forward. They put a lot of things in perspective." ///

BY Matthew Wilde

A FUTURE BUILT ON RESILIENCE

Speakers offer a preview of what you'll hear at the virtual DTN Ag Summit.

Two words that best describe 2020 may be "disruption" and "uncertainty."

Both have been at the forefront thanks to the COVID-19 pandemic, low commodity prices, trade disputes and multiple weather disasters.

These are tough challenges to overcome no matter how long you have been farming. That's why you don't want to miss the 2020 DTN Ag Summit, Dec. 7 through 9. This year's event will be held virtually, but it will still feature a stellar speaker line-up who will share their strategic insights on ways growers can farm strong to build more resilience in their farming business. Check out pages 16, 18, 20 and 22 to sample what's in store during the Ag Summit. Go to www.dtn.com/agsummit for registration details. ➤

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FOR MORE INFORMATION ON THE 2020 DTN AG SUMMIT

www.dtn.com/agsummit

RANVEER CHANDRA

- Microsoft Azure Global Chief Scientist
- Partner Researcher at Microsoft Research
- Started FarmBeats project in 2015 and has led it ever since. His past research has shipped as part of multiple Microsoft products; filed over 100 patents.

I grew up in a city in India, but for the first 18 years, I spent a lot of time at my grandparent's farm. They had a mango orchard and grew wheat, rice and sugarcane.

Back then, I didn't like agriculture much. The farms didn't have electricity or indoor toilets. You had to go to the bathroom in the field.

I look back at the extreme poverty and the primitive forms of agriculture. These images are stitched in my mind. When I started at Microsoft Research, I wanted to develop technologies to help farmers. They do so much for us growing our food and making sure we are all well-fed. We have a responsibility to them to make sure they lead better lives. That is one of the motivations for starting Microsoft Azure FarmBeats.

A CLOUD FOR AGRICULTURE

People often ask why? Microsoft doesn't do agriculture. We work with companies across all sectors. We look at it as an opportunity to bring the benefits of digital transformation, to help farmers be more productive and sustainable.

Microsoft Azure FarmBeats is a purpose-built, industry-specific cloud platform built on top of Azure to enable actionable insights from data. We're building a platform that can help ag tech companies gather large amounts of data in the cloud and merge data sources such as field and yield maps, satellite imagery, sensors and weather stations to allow data scientists to run artificial intelligence models, and bring the benefits of data-driven agriculture to farmers.

FarmBeats is partnering with several agricultural companies, such as Land O'Lakes, to make it happen.

We have DTN for weather data.

If you can use data and data-driven insights to augment a farmer's knowledge, not replace it, they can be more productive. It will help them grow more and earn more profit. It will help them adopt sustainable agricultural practices.

SUSTAINABLE FUTURE

As for sustainability, the world needs to reduce greenhouse gas emissions. Agriculture can help. But, how do you measure how much carbon is sequestered (with agricultural practices)? That's where digital tools can help.

The future of agriculture will be more data-driven. Precision agriculture is starting to get adopted at a certain level. But, despite all these innovations, we are still scratching the surface of what can be done.

Management zones now could be a few acres, but it could be at a micro level down to a few inches. What if you could predict what's going to happen in the future and make defensive treatments in different parts of the farm? This could be chemicals, fertilizer or water. This is the future where you can be more productive and cost-efficient. ➤

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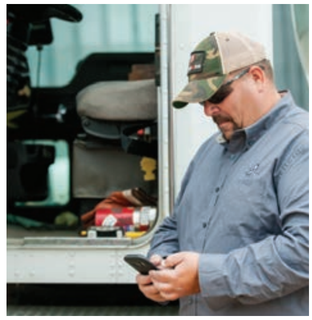

Adapting to things beyond its control has been a strength of the agriculture industry for many years. At a moment's notice a weather event or disease could wipe out growing crops and livestock. Commodity markets are at the mercy of domestic and international events. Equipment can break down, supply chains can be disrupted, and global pandemics can wreak havoc on everyday life beyond the farm gate.

"This is truly a time like no other in modern history," said Jim Spradlin, Chief Executive Officer of GROWMARK. "But even in the face of huge challenges, there are opportunities rising that will make us even stronger."

If any industry can be deemed "essential," it is agriculture. Without food, feed, fiber, and fuel, nothing else matters.

The GROWMARK System was formed nearly 100 years ago with one goal in mind: to serve farmers. Although the methods of service we use today look very different than a century ago, the commitment to improving the long-term profitability of our member-owners is still the driving force.

In 2018, GROWMARK began thinking about what the Farmer of the Future will look like and what they will expect from their suppliers. Digging into this concept by setting long-term goals in each of our product areas – including agronomy, energy, and grain – GROWMARK was prepared to nimbly adapt to the new marketplace by offering systems and tools that kept farmers doing what they do best while ensuring the safety of all involved.

Over the last few years, the GROWMARK Energy Division has been working with FS member cooperatives to install remote fuel tank monitoring systems. Using wireless technology, FS energy personnel can check the amount of product in any tank at any time, from anywhere.

"The tank monitors are a game changer for us," said Kassie Billerbeck, Purchasing and Finance Supervisor for Three Rivers FS, headquartered in Dyersville, Iowa. "They allow us to know where we're at in each location, and we've started using them with customers as well, so we can make sure they have enough fuel to keep them going."

Another piece of technology improving efficiency is the creation of the LoadCheck smartphone app. Agronomy drivers can now receive route and load information in real time, allowing them to pick up and deliver product at the locations that are most logical, based on wait time, distance, and product availability.

"The app allows a truck driver to be proactive and check their load number and resolve any issues prior to arriving at a terminal, it gives the GROWMARK terminal operators visibility as to the number of drivers on the way, and it gives our customers the ability to see in real-time on a map where their load is at and when it will be delivered," said Taylor Zimmer, GROWMARK Crop Nutrients Senior Sales Support Supervisor. "In the past, we have relied on paper records to determine if a load was delivered to a destination, but now we are able to provide geospatial proof of delivery so that drives and customers can be confident in the product they receive."

LoadCheck was an idea brought forward by GROWMARK employees and incubated as part of a company-wide focus on innovation. Being prepared for the future includes having a pipeline of ideas in development that are ready to deploy when circumstances allow. GROWMARK's investment in and commitment to innovation will benefit the entire cooperative system, and the farmers it serves, for years to come.

According to Spradlin, "Growth in any industry will be driven by those organizations that can deliver technology with an unsurpassed customer experience and the expertise that comes with trusted advisors."

The GROWMARK System delivers on all those fronts.

JON GORDON

- Best-Selling Author and Motivational Speaker
- Speaks and writes on a variety of topics, including leadership, teamwork, culture, sales and service.
- Books include "The Power of Positive Leadership," "The Energy Bus" and "Training Camp." Clients include the Los Angeles Dodgers, Miami Heat, Snapchat, Campbell's Soup and West Point Academy.

I admire and respect farmers and what they do so much. They often have eternal optimism. When you see people down by circumstances and events coming at them all time, I want to remind them of the hope and eternal optimism they embody. I want to rekindle that.

With agriculture, there are always unknowns and challenges. The power of positive leadership is about building a great culture and leading with vision, optimism and belief.

But, this is not about seeing the world through rose-colored glasses. It's knowing you have the power to overcome the thorns. It's seeing the reality and finding a way forward to create a better future.

If you are an agricultural leader or have a farm, my message is to stay positive. It goes a long way to bettering your own health, state of mind and well-being. And, it will help you better lead your team.

OPTIMISM FUELS SUCCESS

Duke University did a study on optimists and found they work harder, get paid more and are more likely to succeed in business and sports. The study found optimists believe in a brighter, better future and take the actions necessary to create it. It becomes a self-fulfilling prophecy.

Take Alan Mulally, for example, the man who turned around Ford. He came in when it was losing $14 billion (annually). But, he had the company profitable in a few short years. It was one of the greatest feats in history. And, he defined his leadership style as positive leadership.

Sometimes, positive thinking gets a bad rap. It's not covering up the reality of a situation or ignoring it. It's having the optimism and belief to overcome challenges to create a better future.

And, people sometimes get discouraged and give up. But, we can't live in the past; it's about winning the future. When you lead with optimism and belief, you will help lead yourself, your family and your employees through challenges. Negativity is contagious. It's important to be positively contagious so everyone performs at a high level.

POSITIVE REMINDER

Farming always has ups and downs. This, too, shall pass, even with the COVID-19 pandemic. I've spoken to a lot of organizations about how much they are struggling to navigate through challenges. At the end of the conversation, many say, "I needed that." Sometimes, people just need a reminder of what they already know.

In the midst of a problem, you can lose sight of what matters most and forget to stay optimistic and hopeful. What matters most is family, relationships and business. What's important is innovating and adapting, and finding a way to move forward.


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AMBASSADOR KIP TOM

- Current United States Permanent Representative to the United Nations Agencies for Food and Agriculture in Rome
- Transformed Tom Farms, a seventh-generation Leesburg, Indiana, farm into one of the largest commodity businesses in the Midwest. It has grown to more than 25,000 acres, with locations in the U.S. and in Argentina.

I'm now referred to as Ambassador most of the time, but I prefer to be called a farmer. That's what I've been for 45 years. I've served as a U.S. ambassador to the United Nations Agencies for Food and Agriculture in Rome for the past year and a half, but I'm extremely proud of my farming career. And, when you are called to serve your country by the President of the United States, you respond.

I work with six U.N. agencies, the main focus being on food security and trade. The World Food Program, for example, provides food and humanitarian relief. Typically, it helps people affected by natural disasters, but today, 60% is due to conflict. When you have human conflict, it's impossible for people to feed themselves, so they migrate. When they migrate, they often get caught up in extremism and terrorism. That threatens the security of those countries, the United States and our allies.

There are a lot of policy implications and drivers that come out of Rome and the U.N. Food and Agriculture Organization. We are also watching the U.N. Food Systems Summit that's set to take place next year, as well as the European Union's Green Deal Farm to Fork Strategy. This is something American farmers need to know about.

IMPACTS OF THE EU GREEN DEAL

The Farm to Fork Strategy will not only impact U.S. trade, agriculture and economic growth in our country, it also impacts food systems around the world.

There are 500 million small farmers in developing countries that need access to innovations and tools we have in the U.S. We are pressing really hard for that, but the Europeans are pressing just as hard against it. They are promoting a food system that indulges the rich—indefensible scientifically and morally. They don't want to allow biotech traits, synthetic fertilizer usage or chemical usage. In the meantime, productivity goes down.

Trade is essential for us. We need to make sure we don't have nontariff barriers. If the EU achieves success with Farm to Fork, they've already commented the resulting trade barriers won't allow our food in. This could include pork, corn, wheat and anything else. They are currently in Africa promoting this. We need policies that promote free and open trade.

I want to defend American agriculture and make sure it remains strong. At the same time, the solution for feeding a hungry world is improving agricultural productivity in the developing world. I believe in this mission. ➤

KEN ERIKSEN

- IHS Markit Senior Vice President, Head of Client Advisory and Development, Energy and Transportation and Policy
- Background as an agricultural statistician with the USDA's National Agricultural Statistics Service.

This may sound like a "duh" statement, but at the end of the day, everyone has to eat. There will always be opportunities for American farmers. However, in a world where population concentrations are spread out and diverse, and arable land is not readily available in some areas, the duh statement becomes more complex.

When we think about getting people the necessary calories and protein, it can be a challenge in the face of a pandemic. Surge buying out of fear initially drew food supplies down. But, we have seen a resiliency of that system to come back.

Hog slaughter, for example, wasn't expected to catch up with the backlog for months, but by mid-August, it had. When there's a challenge to be met, people rise up to meet it.

VERTICAL INTEGRATION

Vertical integration within agriculture will continue. Big consumer package food companies buy a lot of ingredients. But, will they go backward and get closer to the farm? Costco, a big box operator, got into growing and slaughtering chickens. It is running at capacity ahead of schedule.

What's interesting is what one short, six-month pandemic did to disrupt business models so dramatically. It's painful for those disrupted, but they can come out strong and better going forward.

THOUGHTS ON EXPORTS

With African swine fever and COVID-19, there's a lot of change going on in China and Southeast Asia concerning how livestock is raised and where people buy food. There's a shift toward larger, integrated farms and urban cold storage integration (chilled and frozen meat). People used to go to the wet market daily; that has been turned upside-down.

Now, companies have set up integrated hog farms and compound feed operations. On the backside, there are slaughter plants and retail stores.

The flow of corn and soybeans needs to be steady. China needs feed and needs it yesterday, and right now we're sending it as fast as we can.

For 2021 and 2022, we see record grain and soybean exports out of the United States. There are opportunities for protein exports for pork and also beef to a certain degree.

In Indonesia, tempeh is still a strong part of the diet, and that requires soybeans. The dairy market will continue to struggle until food service recovers. We see good demand for crushing businesses for oil and flour, but we don't foresee growth in ethanol in the short or medium run.

COMPETITION HEATS UP

South America has been awakened. Price incentives exist to compel the country to produce more soybeans, corn and livestock. The U.S.-China trade situation has helped.

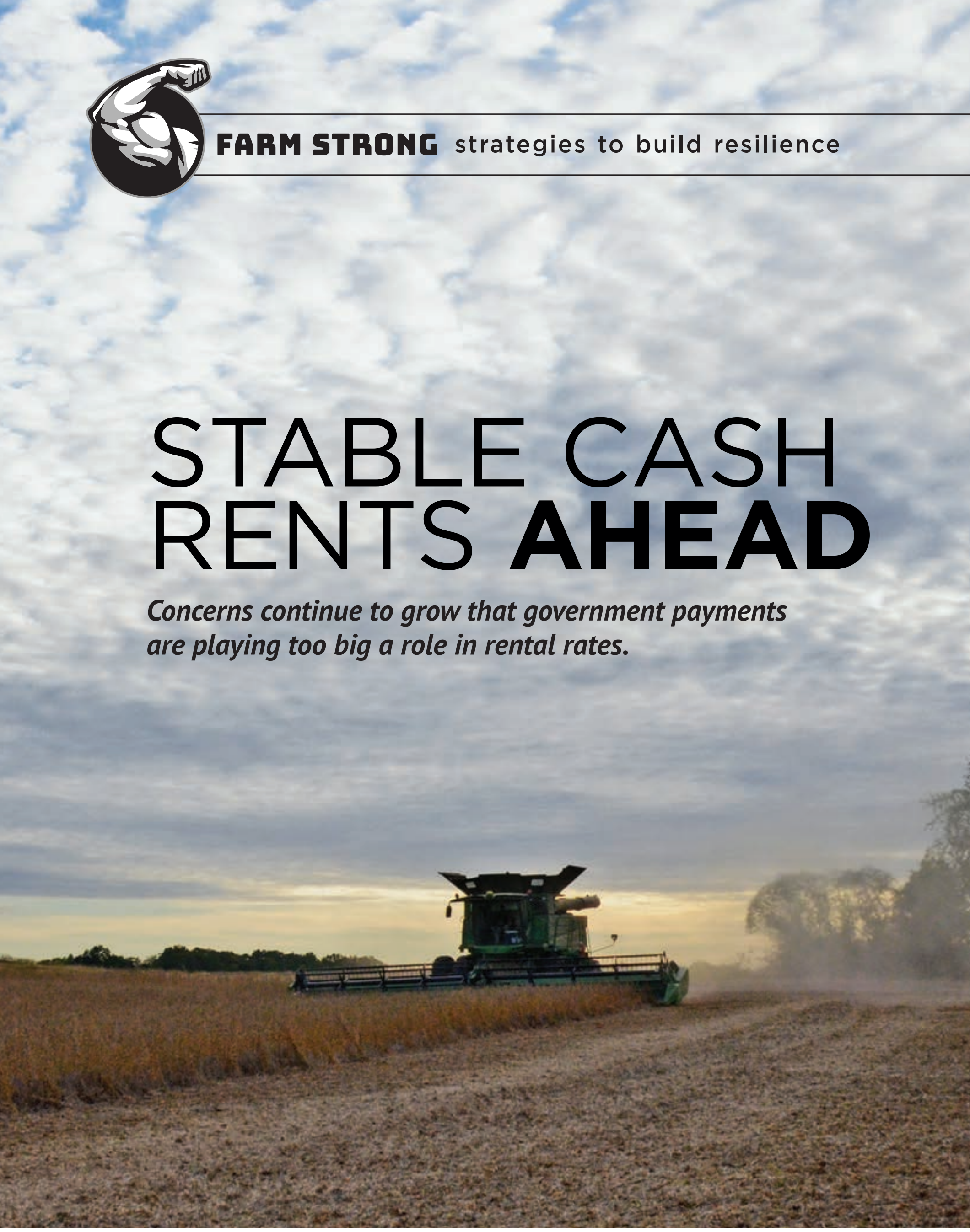
So, there's competition for U.S. farmers ahead, but they should still have opportunities in soybeans and corn. However, the competition is catching up, and fast. The U.S. has invested some in its infrastructure to move exports, such as dredging the lower Mississippi River and repairing locks and dams. U.S. farmers have to stay committed to infrastructure being improved. ///

FARM STRONG strategies to build resilience

BY *Elizabeth Williams*

STABLE CASH RENTS **AHEAD**

Concerns continue to grow that government payments are playing too big a role in rental rates.



BRENT WARREN

Cash rent negotiations between farm tenants and landowners will be tough again this fall as farmers face negative cash-flow in 2021. Ad hoc federal payments in 2019 and 2020 kept many farmers at, or above, breakeven. But, Gary Schnitkey, ag economist at the University of Illinois, believes the future is uncertain.

Profit projections for highly productive farmland in central Illinois in 2021 indicate farmers could pay $222 per acre in land rent and break even. But, this is an area where average cash rents run $275 per acre.

"The trend in cash rents is to stay the same," Schnitkey explains. "However, there is a credible argument they should be $10- to $20-per-acre lower in some cases, particularly in Iowa, where yields will be lower. Most of Illinois is looking at good yields."

Those Illinois numbers are for a farm that is 50% corn and 50% soybeans, with trend yields of 217 bushels per acre (bpa) for corn and 68 bpa for soybeans. They also reflect a cash price of $3.40-per-bushel corn, $8.90-per-bushel soybeans and $30-per-acre total from a price loss coverage (PLC) government payment ($60-per-acre corn, $0-per-acre soybeans). It does not factor in any other government payments in 2021.

CASH RENT OUTLOOKS MIXED

Doug Hensley, president of real estate services, Hertz Farm Management, Nevada, Iowa, predicts cash rents will be neighborhood-specific for 2021. Across central Iowa, a derecho (strong horizontal wind) flattened many fields and slashed what had been expected to be good yields.

Ben Riensche, who farms in northeast Iowa near Jesup, says the corn and soybean markets are still below breakeven for him, with only a slight bounce this fall. "Government payments help some, but nothing like the $300-per-acre revenue declines coming from the decrease in the value of our corn crop," he says, comparing a 20 to 25% drop in yield and a meager 6 to 7% bounce off the bottom in prices.

Average cash rent in Iowa in 2020 was $222 per acre. Northeast Iowa had the highest average cash rents, at $248 per acre. Calculating rents per bushel yield, Iowa's cash rents in 2020 ranged from $1.04-per-bushel corn yield to $1.22 per bushel.

Barry Ward, ag extension economist at Ohio State University, concurs there are going to be pockets with a lot of pressure on cash rents.

“Government payments help ... but nothing like the $300-per-acre revenue declines coming from the decrease in value to our corn crop.” –Ben Riensche

BOB ELBERT

“Northwest Ohio saw excessive rainfall last year with a lot of acres not getting planted,” he reports. “This year, parts of the same area suffered a drought. On the whole across the state, I would guess rents for 2021 won’t see much change from this year.”

In western Ohio in 2020, cash rents for top-producing farmland with average corn yields of 216 bpa were $242 per acre (down from $247 in 2019). Cash rent per bushel of corn yield averaged $1.12.

Ben Syfert, an agricultural banker with First Mid Bank and Trust, in Arcola, Illinois, says looking toward 2021, he expects cash rents to be flat. At press time, he was reporting average to better-than-average crops in east-central Illinois across Champaign, Coles, Douglas, Edgar and Moultrie counties.

“Decent yields and better prices really make a difference to the bottom line,” Syfert adds. “While the overall trend is steady, on larger tracts that attract more interest we might see a slight increase, but there are a couple of young farmers in the area that some landowners are interested in helping them get established and are willing to help them out.”

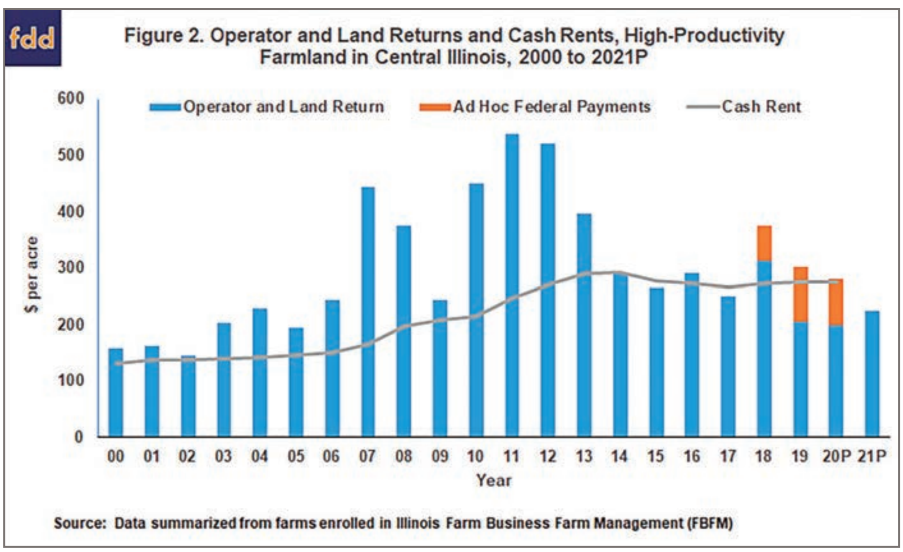
RENTS FACTOR IN PAYMENTS

In September, Coronavirus Food Assistance Program 2 was announced and is meant to help farmers who continue to face market disruptions and costs associated with the pandemic. The program should be of help in Illinois, Schnitkey says. “We’ll get by, but that is premised on high yields and federal aid.”

The federal government kept farmers afloat in 2020, according to University of Illinois calculations. Operator and land return is projected at $297 per acre, with $32 coming from ad hoc disaster payments. Paying $275 average cash rent, a farm operator loses $10 per acre without the federal aid this year. With the federal aid, the farmer’s return is projected to be just $22 per acre, not a lot of cushion for the coming year.

Ohio State’s Ward notes government payments also tend to get capitalized into rent payments. “My concern is they are becoming baked into the psyche of farm operators and landowners. Everyone is expecting government payments now if prices don’t improve.”

That may not hold true in a nonelection year, Ward warns. “Although I don’t expect cash rents for 2021 to change much, I do think land rents should go lower in the next two to three years given current cost structures and price levels. Without government payments, profit levels do not support current cash rents.” ///



Without federal ad hoc payments, cash rents would have significantly exceeded returns to farmers in 2019 and 2020.
UNIVERSITY OF ILLINOIS

BY *Victoria G. Myers*

COMMODITIES **MAY TURN THE CORNER**

DTN analyst is cautiously optimistic better times are ahead for most major crops in the U.S.

Markets aren't as linear as they used to be. There was a time when a reasonably accurate supply and demand report gave a good crops analyst the data necessary to make well-informed projections about where an industry had been and where it was likely to go in the coming months.

Today's markets are more dynamic, reacting quickly and often emotionally. This year was a good example of how the unexpected can impact prices and a lesson in how to react to that change.

Todd Hultman, DTN lead grain market analyst, has worked in the commodity futures industry for more than three decades. Even with all of that experience, he says 2020 was a year unlike any he'd seen before. Where did it leave commodities? What happens moving forward? Expect the unexpected next year. But, most producers can also expect a little good news when it comes to prices.

Todd Hultman
DTN Lead Analyst

➤ Read Todd's blog at **ABOUT.DTNPF.COM/MARKETS**.

➤ You may email Todd at **todd.hultman@dtn.com**, or call 402-255-8489.

FORECAST: U.S. CORN 2020–21

Ending Stocks: **2.17 billion bushels**

USDA Average Cash Price: **$3.60/bushel**

DTN Projected Average Cash Price 2021: **$3.50/bushel**

BULLISH HOPES FOR CORN

For corn producers, 2019 started bad and pretty much got worse as the year progressed. Hultman recalls some of the worst planting conditions on record, followed by the 2020 global pandemic that hit corn in two big ways.

"First, we saw energy demand drop dramatically, which meant ethanol demand dropped. So, we took a big hit on that side. Ethanol production as of early October was still down 9% compared to a year earlier," he explains.

The other shoe the market heard drop was on the feed demand side. "Livestock producers were in a dramatic financial bind as we saw packing plants close. Cattle and hog production stopped throughout the Midwest, putting considerable financial stress on producers. This caused concerns for corn markets due to grain usage."

All of this weirdness flipped the typical seasonal patterns for corn prices. Normally, the best opportunity to sell grain is late spring into early summer. Hultman notes this year, prices dropped in late February and early March, and the market started seeing lows when it typically saw highs.

"Then we had a late surprise," he says. "The big windstorm that blew through Iowa on August 10, coupled with drought, took off some yield expectations. About that same time, China started to dramatically increase purchases of corn."

Hultman is cautiously optimistic when he brings up what he calls a "bullish hope" that China will continue to buy corn at an increased pace. ➤

"It's hard to tell what their actual supply and quality situation is," he says. "Their domestic corn prices are now close to $9 per bushel. All of their food prices seem to be elevated as we move into October. So, that tells me there could be more export sales in our future with China."

FORECAST: U.S. SOYBEANS 2020–21

Ending Stocks: **290 million bushels**

USDA Average Cash Price:
$9.80/bushel

DTN Projected Average Cash Price 2021: **$10.80/bushel**

SOYBEANS HEADED HIGHER

Trade disputes and dueling tariffs with China set a worrisome tone for the soybean market early.

"China's commitment to buy," Hultman remarks, "clearly wasn't ironclad."

Those early disappointments were compounded as COVID-19 became a global concern. By June, Hultman says the feeling in the market was that soybean prices were healing.

"Part of that was the fact that soybeans didn't have the energy exposure corn did through ethanol. And, part of it was that we looked at Brazil's soybean prices and saw that just a couple of months after recording a large soybean harvest, they were making new market highs due to China's aggressive buying."

This added up to good news for U.S. soybean producers, as USDA reported 74% of the crop was considered "good to excellent," the highest such rating in 10 years.

Moving into the fall, China's aggressive buying continued, and Hultman noted that at press time, the U.S. export sales commitment looked pretty solid, at 1.55 billion bushels—more than half of that to China. "Since early August, this market has almost been straight up, and I think there's still some room on the upside."

FORECAST: U.S. WHEAT 2020–21

Ending Stocks (total):
883 million bushels

USDA Average Cash Price (HRW):
$4.70/bushel

DTN Projected Average Cash Price (HRW) 2021: **$5.00/bushel**

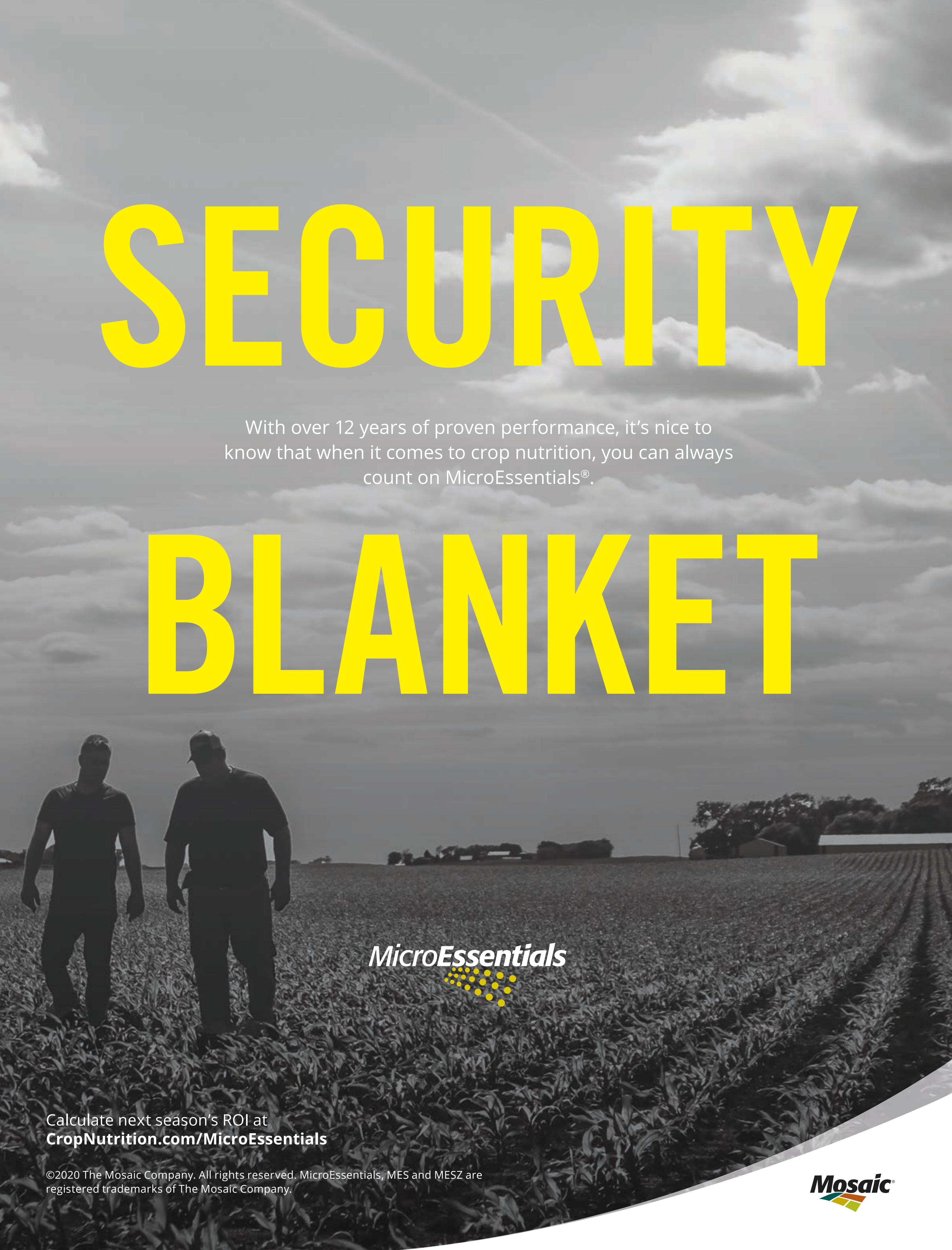
WHEAT HOLDS THE LINE

For five years, the U.S. has held a large wheat surplus, hovering around the 1-billion-bushel mark. Moving into 2021, USDA reports that will drop modestly, to 883 million bushels.

"Wheat competition is stiff all over the world," Hultman says. "We are vying for second place in the wheat export market right now against Canada and Europe. Russia is king when it comes to wheat production. We are looking at a record world wheat crop for 2020 and a record world ending stocks level."

There may be a glimmer of positivity shining through all those wheat supplies though. "Winter wheat is being planted as we go to press, and there are two areas of concern," Hultman says. "Russia and the western U.S. both have drought issues. La Niña conditions remain in effect, and that generally means the Southern Plains will be drier possibly into early 2021. The fact that we are planting a winter wheat crop into dry conditions is generating bullish enthusiasm."

There's also a positive take on hard red winter wheat (HRW), of which USDA puts ending stocks at 334 million bushels. Hultman notes ➤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this is the lowest ending stocks level in five years. Soft red winter wheat (SRW) is at 102 million bushels ending stocks, the lowest in six years. So, while world supplies are large, things are tighter in the U.S., and export shipments are up compared to year-earlier numbers.

FORECAST: U.S. COTTON 2020–21

Ending Stocks: **7.2 million bales**

USDA Average Cash Price: **61 cents/pound**

DTN Projected Average Cash Price 2021: **61 cents/pound**

COTTON DEMAND HURTING

Cheap oil prices coupled with a global pandemic didn't do the cotton market any favors. By press time, USDA was looking for an average price of 61 cents per pound.

Hultman notes earlier in the year, the commodity had some bounce-back in it when prices were in the 70s, but as the pandemic hung on month after month, prices dropped.

"Oil prices are cheap now, and that is creating some tough competition for cotton," he says. "There have also been concerns over whether China would import much cotton. I think at the heart of the issue is that cotton is not the necessity of something like rice or wheat. Both of those held up through the pandemic, in large part, I think, because they are common human diet staples for the poorest levels of society. You can do without buying cotton for a year, but people have to eat."

Cotton exports slid by nearly 1 million bales compared to a year ago, the analyst adds. As 2020 ended, he says the market isn't excited about more cotton with ending stocks around 7.2 million bales.

FORECAST: U.S. RICE 2020–21

Ending Stocks: **47.7 million/cwt**

USDA Average Cash Price: **$13.20/cwt**

DTN Projection Average Cash Price 2021: **$12.50 to $13/cwt**

RICE MARKET HOT

Its reputation as a basic staple for so many diets around the world served rice well through 2020. Demand held despite multiple global challenges.

"World rice production is up 1% for the new season," Hultman says. "But, in the U.S., we've expanded rice production by 22%."

He notes there were good pricing opportunities for the grain this year, as spot rice prices peaked in June at more than $20 per cwt. "That's off the charts. You have to go back 12 years to see prices like that. It's encouraged increased production in the U.S., where we are looking at one of our biggest plantings in memory. As a result, ending stocks are expected to go up from 28.7 million hundredweight to 47.7 million hundredweight."

There is some caution in the market, he adds, as speculators are on the long side, leaving no strong argument for higher prices.

"Overall, world demand for rice doesn't fluctuate that much," Hultman explains. "It's good news, bad news in a way. We don't see those big upswings when the economy is good, but we don't necessarily see downswings when it's bad either." ///

STORY AND PHOTOS BY *Des Keller*

Kansas' Dustin Edwards has cut back on acres where landowners won't lower rents or agree to crop share leases.

GROWING **PAINS**

Choosing the right time to boost acreage is a hard move to make in challenging times.

Dustin Edwards is nothing if not flexible. He could, for example, expand on the 3,000 acres he currently farms. But, he's having a hard time imagining how that would work right now.

"My big thing is doing more with less," says Edwards, 38. He is a busy man, putting a lot of miles on his truck thanks to rental farmland spread out over more than 90 miles north to south in eastern Kansas.

"My big thing is doing more with less."

–Dustin Edwards

"I want to take better care of what I've got," he says. "I'd rather grow 3 to 4% more crop on those 3,000 acres and be more profitable."

This isn't idle chatter on Edwards part. He's seen the other side of the fence, and it wasn't what he thought it would be.

Five years ago, Edwards was farming 5,000 acres. As commodity prices declined in the doldrums of 2014 through 2016, he chose to shed acres—mostly where landowners were reluctant to lower rents or shift to a crop share type of lease.

He also cut overhead. The past three years, Edwards used one tractor for everything. "We

put 750 to 800 hours on that tractor each year," he says. "There isn't much room for error when you have less equipment."

He worked the operation to be more efficient in moving equipment from one location to another, making the most out of a trip. He even cut out most of those runs for takeout food for the harvest crew.

"We pack our lunch most of the time now," Edwards says. "Three years ago, we bought lunch every day. Now, we have our own cooler and spend $50 at Walmart on food to make lunches, and four of us eat for a week."

It's all adding up. The operation was profitable in 2017, 2018 and 2019. But, Edwards says he's still working off the debt left from the 2015 and 2016 seasons.

In 2021, would he farm additional acres if the opportunity was presented? "I won't kid you," Edwards laughs. "I have the typical farming spirit, so if someone came along and said, 'I have 3,000 acres, do you want to rent it?', then yeah, I'd have to be interested."

But, he adds he doesn't want additional acres just for the sake of growing. "I'd have to determine whether it could be profitable while gauging whether I'd need much additional equipment," Edwards says, noting corn and soybean prices would need to be improved. "You can't make much money with $3.20 corn."

EXPANSION CONSIDERATIONS

There are a lot of producers with Edwards' mindset. Given today's crop prices, who is really in a position to expand?

"An individual that has quite a bit of capital," says Allen Featherstone, head of the department of agricultural economics at Kansas State University. "You'd have to have well above average income statements—in the upper third or quarter of all producers—to be able to cash-flow anything new.

"The way they get in that position is by trying to hold onto equipment longer than they normally would," he says.

Farming gives the Edwards family flexibility to spend more time together.

Another help, Featherstone explains, is a shift to some type of crop share rent as opposed to straight cash rent.

"This involves more equity-sharing of profits," he says. "The trick is finding a landlord who wants to do that."

Edwards can check both of those boxes. His equipment purchases have almost universally been used. His rents have nearly all been converted to crop shares, with landowners essentially receiving one-third of the crop while paying a third of the fertilizer bill.

It's share rent that allows Edwards to avoid having to pay cash up front prior to the season. That is a big advantage for him when it comes to risk.

"My landlords can make more money on shares, and it takes a lot of risk off my table," Edwards says. "This is probably the most important change I've made."

He also stresses that in today's market, there's a lot of really good used equipment available, with the difference between that and new being in the tens of thousands of dollars on every piece.

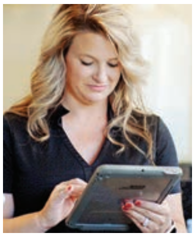
"You add that up on five or six pieces of equipment, and you've saved $150,000 to $200,000," Edwards says. "That can make a difference when crop prices slide."

MANAGING PROFITS

There are several other areas Edwards has focused on to become more efficient and improve profits.

He treats soybeans with the same love as corn. He switched from 30- to 20-inch rows to help generate a better canopy to squelch weed growth between the rows. He aspires to make his soybean fields as weed-free as possible by starting with preemerge herbicides in the fall and spring. "The easiest way to kill ➤

Ask the Agronomist



Dr. Cristie Preston

Fall-Applied Nitrogen for 2021 Corn Success

Optimizing returns on every dollar spent on fertilizer and crop nutrition holds the key to profitable crop production. *Ask The Agronomist,* brought to you by Nutrien's eKonomics, provides crucial nutrient management answers as you prepare for the 2021 growing season.

Q ***With timely harvest occurring in much of the Midwest, what tips can help farmers succeed with fall-applied nitrogen ahead of corn?***

Dr. Cristie Preston: When applying anhydrous ammonia, soil temperature needs to be 50 degrees or below so microbes won't convert the ammonium forms of nitrogen to nitrate form that can be lost. Use a nitrification inhibitor as needed and be sure it is knifed deep enough in soil conditions that allow the band to close.

If applying urea, wait one week after the soil temperatures have been 50 degrees or less. If broadcasting urea, make sure you're using a urease or nitrification inhibitor or polymer-coated urea, with a recommended tillage incorporation, to decrease the chance of losses.

Be sure to abide by all state regulations regarding fall fertilizer applications. Minnesota's new Groundwater Protection Rule, for example, begins this fall with nitrogen restrictions in certain areas.

Q ***How do soil attributes and weather conditions impact the success of fall-applied nitrogen applications?***

Preston: When it comes to potential ammonium losses, generally finer-textured soils have greater capacity for holding ammonium to prevent losses with fall application. Ammonium losses as volatilization can be greater in soils with higher pH. It is not recommended for fall applications of nitrate fertilizers due to the high potential for leaching losses with high rainfall events, especially in coarse textured soils.

Q ***If considering split-applied nitrogen (N) to reserve more of my spring window for planting, is there a best recommendation for fall versus spring-applied? And what about variable-rate by zone?***

Preston: Since weather and inhibitor use can dictate the amount of fall-applied nitrogen left in the spring, we're seeing more farmers split nitrogen applications between fall and either planter-applied starter or sidedress or all three applications. Some farmers use the pre-sidedress nitrate test (PSNT) tool to help assess current N availability.

You can reduce the risk of N loss in the fall by using an inhibitor or coated urea, then focus a higher percentage of N application during spring and early summer applications, closer to when corn nitrogen needs are greater.

Regarding variable-rate application, a blanket-rate application in the fall is a better practice for N. If you're going to variable-rate anything, phosphorus (P) and potassium (K) are excellent candidates, as they are relatively immobile in the soil.

Q ***As more states adopt some form of nutrient reduction strategies to improve water quality, what practices help farmers lower their risks?***

Preston: The most significant practice to reduce risk is to avoid nitrate fertilizer application in the fall. If you need to make a fall application, reduce the amount of potential nitrate loss by protecting N from being converted to nitrate using nitrification inhibitors, urease inhibitors or polymer-coated urea. Remember that research shows some nitrates will exist in water due to the natural mineralization of organic matter, even if you didn't apply N fertilizer. Ninety percent of the nitrogen in the soil is present as organic matter.

Also, make sure you apply in soil temperatures below 50 degrees.

Q ***What environmental factors should be tracked this winter into early spring to determine spring nitrogen needs?***

Preston: The two biggest factors to track are soil temperature and rainfall. Cooler soil temperatures in the spring might be limiting N availability because those microbial processes are still slowed down. That's why we suggest that farmers apply N, P and K in a starter form to help promote spring growth. The PSNT test can be used to determine plant-available nitrates at that point. But if it has been a cooler spring, you might not get mineralization from organic sources.

If you use a polymer-coated urea product like ESN, it doesn't lose nitrates as it is temperature driven, not water driven. The granule allows water in to dissolve the urea inside the polymer coating. Then as the soil temperature warms up in the spring, the polymer coating breaks down to release the nitrogen—protecting it from being lost.

For More Information

Visit **Nutrien-eKonomics.com** for news and fertility management information. It also contains valuable tools like a Rainfall Tracker and Growing Degree Day calculator to help farmers assess possible fertility loss and plant development needs.

eKonomics™

a pigweed," he says, "is to never see a pigweed."

When it comes to fertility across the farm, urea is the preferred nitrogen fertilizer source whenever possible. Urea is cheaper than anhydrous ammonia, and Edwards doesn't have to use another piece of equipment to apply it.

A common way to boost income for many farm families is to pick up additional work when possible and profitable. Edwards does some custom-farming operations for others on occasion.

He also benefits by getting part-time labor help from his brother, who, in return, can use Dustin's equipment to farm his own 500 acres. The brothers also trade labor and machinery to help farm their father's farm—another 800 acres.

FAMILY TIME MATTERS

Questions about farm size and how much he wants to grow the operation factor in how important it is to spend time with wife, Ashley, and their three young children: Jett, 10; Emma, 7; and Eli, 3½.

Edwards says he's grateful for the flexibility of a farmer's life.

"This past summer, I wanted to drive to Illinois to get a look at a used combine," Edwards says. The catch was that the two younger children wanted to go with him. So, they loaded into the truck with Dad, toting blankets and iPads, and made the 12-hour round-trip excursion in a day.

Back at home, the children gushed to their mom about the places they ate (mostly drive-throughs) and the things they saw. They had crossed the Mississippi River—"the biggest river in North America" they informed her.

"This job allows me to take the kids with me on numerous occasions," he says. "These are things they will remember for the rest of their lives." ///

The Income Difference MFP Makes

To date, about $30 billion has been authorized for Market Facilitation Program (MFP) payments to U.S. farmers to dilute the effects of the U.S. trade war with China. The program has particularly affected the soybean market, where China has historically been a significant buyer. That these MFP payments have been helpful the past couple of years isn't in doubt.

"A lot of farmers would be in really bad shape without them," says farmer Dustin Edwards, of Lebo, Kansas.

"Roughly 55% of average net farm income for Kansas producers came from MFP," Kansas State University ag economist Allen Featherstone explains. Using data from the Kansas Farm Management Association, 2019 average net farm income in Kansas was $110,380. Without MFP, the net average farm income falls to $49,963. And, if you don't include money from additional government programs, the average net farm income falls to $30,361.

"Without MFP, Kansas farmers could be looking at that farm income dropping to about $20,000 in 2020," Featherstone says. Another round of MFP payments has not been authorized for 2020. He says China has been more aggressive in crop purchases in 2020. In general, U.S. farmers received government payments that were more than the short-term price effects of the trade war, according to an economic analysis by Kansas State University economists Joseph Janzen and Nathan Hendricks. In particular, the pair found that payments for cotton and sorghum were substantially higher than the price damage inflicted by the trade war.

Even with the MFP payment, 18% of Kansas farms lost money in 2019. In 2020, an estimated 40% of those farms will lose money, the Kansas State University economists agree. Nearly 70% of farms will earn a net income below $50,000, which is far below the typical family living needs.

FARM STRONG strategies to build resilience

BY *ShayLe Stewart*

FOCUS ON OPPORTUNITY

The next challenge around the corner is hard to predict, but good management always pays off.

As we look to wrap up the fourth quarter of 2020, the only certainty that exists is that uncertainty will continue to dominate globally, domestically and most certainly throughout the U.S. cattle market. The coming months will be challenging. Not only are cattlemen balancing dynamics within the market, they are also managing a day-to-day environment far beyond the realm of anything anyone has seen or experienced before.

COW/CALF PRODUCERS AND COSTS

As producers begin to prepare for winter, it's important to think about how management decisions could change, and hopefully increase, a ranch's bottom line moving forward.

Often, cow/calf producers focus so exclusively on marketing calves that they neglect to hold other inputs accountable for the operation's overall expense and often overlook other revenue streams. Being in the black isn't just about getting a good market price, it's about spending wisely so money invested is money returned.

While there's no denying it is vital to market calves to their fullest potential, it's equally important to manage input costs such as hay, winter grazing and mineral supplements. As drought became more widespread, feed expenses were already exponentially higher in some regions at press time. These prices could continue to climb as winter progresses. Anything an operator can do to avoid carrying animals that won't provide an economic return through the winter is money in his pocket.

One of the most overlooked and underutilized markets is that of cull cows. Culls attribute anywhere from 10 to 20% of a cow/calf operation's total annual revenue. That's why it's as important to have a marketing plan for cull cows as it is to have a marketing plan for calves.

So, as we strap in for 2021, watch feed costs and prepare for them to get higher. Be willing to adapt your usual management program. Don't weigh the operation down with anything that isn't paying its way. And, lastly, look for ways to diversify income streams and adapt as the new market starts to step up and show us what it's made of.

STOCKERS AND BACKGROUNDERS

With the number of available wheat pastures limited this year accompanied by all-time high feedlot placements early in the fourth quarter, backgrounders have a tight balancing act heading into 2021. That doesn't mean there aren't opportunities. With feed costs being one of the biggest unknown factors going into the new year, if backgrounders have stockpiled feed or forages, there are profits to be made by carrying calves over into 2021, especially when looking at how the futures complex is trending.

Regardless of where you look—north, south, east or west—yearlings performed exceptionally well through online and sale barn auctions across the country in 2020. Backgrounding calves can be a good strategy to offset some of the risk feedlots are trying to avoid right now. As such, this sector could see substantive dividends as the number of available yearlings continues to grow ever so thin.

PLAN FOR HIGHER FEED COSTS

At this point, the cattle-feeding industry sits with more unanswered questions than possibly ever before. Establishing a more positive marketplace for beef in 2021 means feedlots have to improve front-end currentness, scale down carcass weights, grow beef demand domestically and continue to be robust exporters and competitors internationally. There's no reason feeders can't regain some

leverage in the coming months, turning 2021 into a reasonably positive year for most.

With vast placements late in summer, feedlots need to be prepared to strategically market cattle when they become finished in early-spring 2021. Ample numbers of market-ready cattle will favor the packers' position.

Cattle feeders also need to closely track corn prices. While 2020 provided the blessing of manageable corn prices, that may not be the case in 2021. Feedlots need to be prepared for higher prices, which includes using tools like forward-pricing and considering alternative rations.

INDUSTRY OUTLOOK MIXED

The cattle market endured a lot of incredibly tough moments last year. Despite the heartache and hardship, it seems nothing short of miraculous today to be able to say that U.S. cattlemen are ready to take on whatever comes next. The resiliency of the cattle industry can be an example to the rest of the country. While 2020 has been tough, it taught us to sharpen our pencils and see our operations with more clarity. What's key to remember is every challenge has an opportunity attached to it. We can find that positive side of things if we work together as an industry. ///

ShayLe Stewart
DTN Livestock Analyst

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BY *Rod Mauszycki,*
DTN Tax Columnist

TAX AND ESTATE **PLANNING REVIEW**

The IRS didn't change a lot in 2020, but the outcome of the general election could increase concerns of coming change for heirs of farmland.

What a wild ride. The year 2020 brought us COVID and a series of stimulus packages. It brought us a presidential election along with two very divergent thoughts on tax policy.

While the Coronavirus Aid, Relief and Economic Security Act (CARES) suspended many provisions in the Tax Cuts and Jobs Act (TCJA) for 2020, those are set to go back in place in 2021. The pandemic also means little in the way of tax legislation passed that will impact 2021. But, there are still plenty of things to consider as we look to the new year.

TCJA provisions deferred by the CARES Act return in 2021.

At the time of this writing, the presidential election has not taken place, but here are some thoughts on tax policy.

PAYCHECK PROTECTION PROGRAM FORGIVENESS

As of Oct. 1, the amount of debt discharge of a Paycheck Protection Program (PPP) loan was excluded from gross income for federal income tax purposes. However, the IRS issued guidance saying expenses attributable to excluded income from debt forgiveness are not allowable. Further, if wages are not deductible, how would that impact the 199A calculation? Borrowers should look closely at which qualifying expenses they should take to offset PPP funds.

There is a lack of clarity about the treatment of the nonallowable expenses. If the PPP forgiveness approval isn't received by year's end, the general thought is one can still claim the expenses in 2020. However, there would be an adjustment. Unless something is passed in Congress, farmers need to give significant thought to the year they file for PPP forgiveness.

SUSPENSION OF EXCESS BUSINESS LOSS

Under the TCJA, individuals were limited from using more than $250,000 ($500,000 married filing jointly) of business losses to offset nonbusiness income. The excess business loss (EBL) provision does not apply to C corporations and is indexed for inflation. EBL is treated as a loss and becomes a net operating loss (NOL). The CARES Act repealed the limitation for years beginning before Jan. 1, 2021. The repeal is nonelective and applies to 2018, 2019 and 2020.

Depending on the situation, a farmer may want to increase nonbusiness income in 2020 to utilize business losses. That may decrease nonbusiness income in 2021 when EBL comes back into play.

NET OPERATING LOSS CARRYBACK

The TCJA provides that for years ending after 2017, the NOL carryback was repealed except for farms (two-year carryback). NOLs carried forward could offset 80% of the taxpayer's taxable income. The 80% provision also applies to the two-year farm NOL carrybacks generated in years beginning after 2017.

The CARES Act allows for NOLs to be carried back five years and suspends the 80% taxable income limitation through 2020. Also, the two-year carryback provision for farms was temporarily suspended. Post-2017, NOLs will be subject to the 80% taxable income limitation for years beginning in 2021 and beyond.

Because of the suspension of the 80% offset, farmers may want to generate additional losses in 2020 to carry forward. ➤

ADJUSTED GROSS INCOME FOR FARM PROGRAMS

Under Market Facilitation Program (MFP) and Coronavirus Food Assistance Program (CFAP), average adjusted gross income (AGI) could exceed $900,000 as long as more than 75% of your income comes from farming. In the past, wages could not be included in farm income. For those with farming corporations, this was a huge disadvantage. Going forward:

- Wages from closely held entities qualify as farm income if:
(1) the entity is owned by five or fewer individuals owning at least 50%, and
(2) the entity materially participates in farming.
- Interest Charge Domestic International Sales Corp. (IC-DISC) dividends will be treated as farm income if the IC-DISC materially participates in farming.

The clarification of farm income could help those who had payments limited by AGI.

A LOOK TO 2021 AND BEYOND

The 2021 tax year should revert back to the provisions in the TCJA. The bigger questions are who wins the presidential election, and do we have a Democrat or a Republican Congress?

As the TCJA came under President Donald Trump, we are aware of his tax policy. But, what happens if former Vice President Joe Biden wins, and the Democrats control Congress?

At press time, the outcome was unknown, but the Biden tax plan, which could come into play in any number of ways moving forward, includes these provisions:

- Increase corporate tax rates to 28%.
- Phase out 199A deduction for income more than $400,000.
- Eliminate stepped-up basis.
- Restore the 39.6% tax rate for income more than $400,000.
- Increase capital gains from 20 to 39.6% for income over $1 million.
- Impose 12.4% social security tax on wages above $400,000.
- Increase Child and Dependent Care tax credits.

The biggest challenge to farming under the Biden plan is not income tax, it is estate tax. Without stepped-up basis, the beneficiary would take the deceased individual's basis in the assets. In farming, this often means land would have minimal basis, and equipment/buildings would have little basis (assuming Section 179 and bonus depreciation are used). The result is a huge deferred tax liability looming for the farm community.

There is also the issue of the estate tax exemption. Currently, the estate tax exemption is $11.58 million per person. This is set to sunset at the end of 2025 and revert to pre-TCJA numbers. The president and Congress could revert the estate tax exemption to pre-TCJA prior to 2026.

Herein lies the problem: If the estate exemption is lowered, many farms (1,000-plus acres) may be subject to estate taxes. In addition, if heirs were to sell the assets, they would pay tax on the gain (which may be substantial assuming no stepped-up basis). If capital gains tax increases to ordinary tax rates for those with income over $1 million, there could be instances when heirs sell farmland, and the combined estate and tax rates are in excess of 69%.

There has been no word on a small business/farm exclusion for the estate tax exemption. Some sort of relief should emerge so that small businesses and farms would not get snared in the wide net cast going after high net worth estates. But there are no guarantees. ///

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JIM PATRICO

BY *Dan Miller*

MACHINERY TICKS UP

New and used sales are on the rise at the end of 2020 as industry and farmers adjust to COVID-19.

Major farm-equipment manufacturers were not expecting 2020 to be a banner year. But, they did not expect—how could they—that a globe-circling viral pandemic would sweep aside even less than the stellar expectations for an industry expected to grow to nearly $230 billion by 2026. Agricultural manufacturers faced a yawning unknown as COVID-19 appeared around the world. Factories closed. Supply chains became uncertain at best.

"When we started the year, we thought this would be a year of recovery," Eric Hansotia, AGCO incoming chairman, president and chief executive officer recalls. AGCO saw a great opportunity in the age of the North American machinery fleet. It was as old as it had been since 2013, and with some expectation for better commodity prices and additional government support, AGCO saw opportunity in its equipment lines, especially Fendt's new lines of combines and tractors, and a new planter.

DAYS OF COVID

Hansotia recalls Friday, March 13, the day the reality of COVID-19 descended on AGCO. "We brought our leadership together and said we need to send everyone home," he recalls. "Wherever possible, we need to work remotely. We started seven-day-per-week leadership meetings." AGCO called those executive meetings Control Towers. "We had every business meet, and those led up to a global [meeting] that I led ... to ingest the new information happening around the world, not only about the disease and how to address safety for our employees, but then the impact on our supply chain, what was happening with our farmers and dealers, and how we needed to keep the support processes going," he explains.

By the following Monday, everyone who could work remotely from AGCO facilities was doing so. AGCO reorganized its U.S. factory production floors to account for social distancing and sanitation guidelines. The manufacturer worked 24-hour days with suppliers to keep service parts flowing to farmers and components coming into the factories. AGCO did lose for a short time the production from its European and South American plants. But, it never had to close a plant in the United States.

NEW AND USED TAKE A HIT

March did look bleak for machinery. The Association of Equipment Manufacturers (AEM) reported that March 2020 farm tractor sales fell 15.6% compared to March 2019. Self-propelled combine sales declined by 11.9%.

Those early COVID weeks hurt the used-equipment sales, as well. The used market "flatlined" for February, March and April, says Kyle McMahon, founder and CEO of Tractor Zoom. "COVID took 20% of the auction inventory off the market" in those months.

Tractor Zoom offers a broad look at the used-equipment market through its 450 auction companies' advertisers. The founders of Tractor Zoom also have created an ag equipment valuation product called Iron Comps. For an annual fee, Iron Comps gives farmers, dealers and lenders access to agricultural equipment valuations based on real-time auction data.

Time will tell, but March may have been the worst of it. Manufacturers and auctions began to find their way through the landmines of COVID-19. Factories adapted to new health and social-distancing practices. They found ways to strengthen supply chains. Auction houses expanded their audiences by transitioning to virtual sales.

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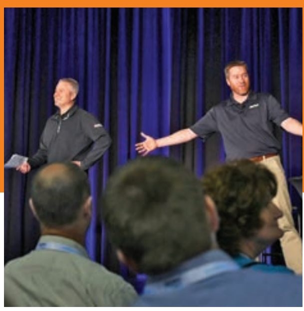

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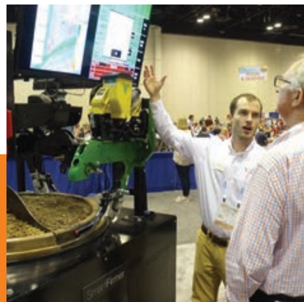

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And, farming machinery continued to be delivered to paying customers. There appears to be an attitude among buyers that "this too shall pass," says Curt Blades, AEM senior vice president of ag service. Farming and ranching rolled on—even in the face of COVID-19, everyone has to eat.

"I'm pretty proud of the manufacturers," Blades says of their work in the early days of COVID. "They were quick to respond, and they were innovative. It was go time, there were tractors already in the field."

BOTTOM-LINE TURNAROUND

The reversal in the used-equipment market came as farmers began to better understand—and were encouraged by—their bottom line. Net farm income looked to be stronger than expected in late spring, so buyers returned to the used market looking to upgrade their older equipment with better technology. "There has been a healthy premium for used equipment since May," says Andy Campbell, marketing director for Tractor Zoom. "COVID has increased the eyeballs on every [virtual] auction. That meant higher prices."

Tractor Zoom's database shows $525 million worth of used machinery was sold during July, August and September. Tractor Zoom also reports 503 combines were sold in August—270 of those sold for more than $50,000.

Net farm income is as good a predictor as any of machinery sales, and that's likely driving tractor and combine sales in recent months.

In its last estimate, USDA forecast 2020 net farm income would climb more than 20% this year. Lower cash receipts from commodities are being offset by billions of dollars of cash flowing out into farm country from Washington, D.C.

The early days of COVID-19 nearly shut down used-equipment sales. But, the market is booming as 2020 comes to an end. JIM PATRICO

The infusion is having its expected effect. AEM's September 2020 Tractor and Combine Report (the most recent at press time) revealed that sales of tractors of all sizes and combines beat retail sales recorded for the same month in 2019. It is the first time this year that tractor and combine categories outpaced sales recorded for the same month in 2019.

"Overall tractor sales continue to be driven by small tractors, but we are also starting to see some improvement in larger horsepower and 4WD tractors," Blades says. "With all tractor and combine segments showing month-to-month growth in September, we're cautiously optimistic that this year may end up strong despite all of the headwinds in the market."

Total U.S. farm tractor sales rose 21.6% in September compared to September 2019. Combine sales rose 8.2%. Four-wheel-drive tractor sales units grew for the second month in a row in September, up 21.4%. Sales of 2-wheel-drive tractors, 100 hp and more, rose 7% in September compared to September a year ago. Through this year's first nine months, 100-hp-plus 2-wheel-drive tractors are off only 1.8% for the year compared to the same time in 2019. Four-wheel-drive tractor sales are down 4.7% through September.

COMBINES ARE HOT

Combine sales are doing well, up 8.2% in September and 4.3% for the year. Blades says higher combine sales may be the result of newer models on the market (John Deere, Fendt, New Holland, Case IH, CLAAS) and the desire by farmers to upgrade their harvesting technologies.

It is sales of 40- to 100-hp and sub-40-hp tractors that have been nothing short of phenomenal. Through September this year, the industry has sold more than 154,000 less-than-40-hp tractors and nearly 50,000 40- to 100-hp units.

In much of the world, a 40-hp tractor is a pretty standard farm machine. Not in the U.S. It is a horsepower range generally not viewed as an agricultural tractor. But, even small units generate important sales. "It's a volume that keeps the lights on," Blades explains.

For the year, 40-hp-and-under sales are up 18% over the first nine months of 2019. ///


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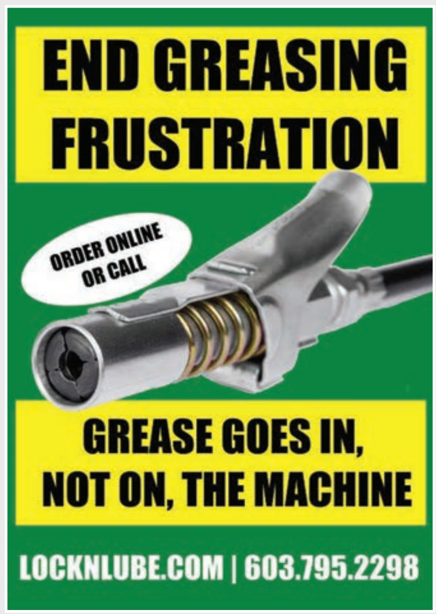
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Agronomist, Syngenta
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–Mark Kitt
Technical Product Lead, Syngenta
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BY Russ Quinn

FARM INPUT CHAIN CHANGING

Competition from e-commerce moves supply chain into an age of transition.

The farm input supply chain is in transition as the industry sees great competition from e-commerce. The traditional agricultural supply landscape in North America is facing threats from smaller startups with fewer fixed costs.

New business models put the farmer more in the middle of the chain where products are bought and sold, but also where data can be shared. This is considerably different than the traditional ag retail model, which has farmers at one end as buyers only. Europe also is seeing this trend but has a more regulated environment compared to North America.

These are some of the conclusions of farm input analysts in a recent Rabobank AgriFinance webinar titled "Age of Transition: Farm Input Supply Chain."

NEW SUPPLY CHAIN

Samuel Taylor, Rabobank farm input analyst for North America, based in New York, believes the farm input chain is moving from a linear, fragmented position to a process with constant feedback loops.

In this system, you have more of a flow of data than in the traditional fragmented industry, he says.

An advantage of this type of supply chain is the ability to make better farm decisions, assisted by different precision ag technologies, he notes.

Taylor, who grew up on an English farm an hour and a half outside of London, says there are still some issues with technology in rural areas. For instance, his parent's farm has "very scant access to internet" despite being fairly close to a large population base.

This changing supply chain frontier is likely to lead to greater accountability and process certification in the future. An example of this is carbon sequestration, he says.

MORE AG E-COMMERCE

An example of this shift is e-commerce business for farm inputs. Taylor says e-commerce is already popular in most people's lives and has grown in relevance, particularly through the COVID-19 pandemic.

Traditional farm input supply chain retailers could see big changes in how they operate in the future.
RUSS QUINN

However, the number of farmers buying farm inputs online lags behind the general public buying other items online. Research shows farmers' purchases online of inputs—pesticides, seeds, fertilizers—are somewhere between 1 to 5% compared to them buying it from normal, conventional retail places; but it's growing significantly.

Taylor believes online purchasing of farm inputs will grow considerably in the future, both from larger and smaller suppliers. Smaller cooperatives and local regional distributors could form partnerships with each other, gaining the advantages of scale like larger ag retailers already have.

INDEPENDENT RETAILERS

Elizabeth Lunik, Rabobank farm input analyst for Europe and Africa, says one recent trend is the emergence of independent retailers. These newcomers are riding the wave of digitalization and online marketplaces to sell farm inputs.

"These cooperatives and independent retailers have sort of said we need to enter this game of offering a hybrid model, making sure there's a good online platform, a good app perhaps, to purchase farm inputs and an offering of not just farm input sales," Lunik says.

Consumers want to know more about what is happening on farms, what is in their food, etc., she says. One recent Rabobank research publication covering seven different regions said one emerging trend is farm input suppliers converting from just product providers to more of a "coaching" position.

Lunik believes companies that supply farmers with farm inputs will need to decide where they will be in the evolution of the supply chain. ///

FARM STRONG strategies to build resilience

Prepare For PERIL

Preventing and handling farm-related accidents require careful planning.

BY *Lori Culler*

Discussing potential safety hazards and how to handle them before they actually happen can go a long way toward preventing accidents.

GETTY IMAGES

The number of ag workers who suffer serious injuries or die on the job each year is staggering. In 2017 alone, 416 farmers and farm workers died from work-related injuries, according to the National Institute for Occupational Safety and Health. Each day, approximately 100 ag workers lose work time because of a work-related injury.

To protect workers and prevent tragedies from occurring on your farm, here are some tips to avoid farm-related injuries.

› HAVE A PLAN IN PLACE

To ensure that you know what to do if an accident happens, have a plan in place for how to handle accidents. Think about the accidents and injuries to which your workers might be the most susceptible, and work on your plan from there. All ag workers should be briefed on how to handle different injuries. Educate your employees about the statistics of on-farm injuries and the risks associated with certain equipment.

› RETAIN EMERGENCY CONTACTS

Part of your emergency protocol should include having current emergency contact information for everyone on the farm available. Know who to contact if anyone gets injured and how they are related to the employee. Also, have any relevant employee medical information that could affect treatment in the event of an injury on file.

› KEEP EMERGENCY SUPPLIES

Preparing for accidents also means having the right supplies on hand. All vehicles and machinery should have a safety kit and eyewash rinse bottles that can be used in case of emergencies. The faster you're able to react to a serious incident, the less serious the injuries themselves will be.

› USE NEAR MISSES AS LESSONS

In addition to all the incidents that result in serious injuries, there are many more incidents that narrowly avoid the disaster. Don't just brush these incidents off; use them as learning opportunities. Discuss them and figure out how to prevent a similar situation from happening again. The more proactive you are about avoiding farm-related injuries, the safer everyone will be.

› EMPLOY THE BUDDY SYSTEM

Some of the most high-risk places on the farm are grain bins and breeding pens. Not only are injuries especially likely to happen here, but they are also more likely to be serious. It may not always be convenient, but one of the best ways to avoid injuries and fatalities in these situations is to implement the buddy system. Always make sure there's someone nearby who could get help quickly in case of an accident.

› CONSTANTLY ASSESS RISK

Take inventory of your surroundings. Look for ways people could get hurt, so you can remove those risks. This will be especially beneficial if you have a lot of hired help on your farm. People are constantly moving things around, and mistakes are bound to happen. Take the time to make sure the keys weren't left in the tractor, the equipment was put back in the correct place and the tripping hazard has been taken care of.

› BRING IN OUTSIDE HELP

Sometimes, you're so used to seeing the same place day after day that you become blind to the risks. In these cases, it might be a good idea to hire an outside consultant to walk through the farm and provide safety suggestions. The consultant may pick up on risks you didn't notice.

You also should assign someone to focus on safety on the farm, either one individual or a small committee for a larger farm. This person's role is to develop policies and practices aimed at preventing injuries, educating other employees and ensuring Occupational Safety and Health Administration (OSHA) and other state compliance. ///