

Spring Issue 2021

# SOUTH DAKOTA SOYBEAN LEADER

A publication of the South Dakota Soybean Association

## 2021 Spring Check-In

- ▶ The Facts about Biodiesel
- ▶ Standing Up to Drought
- ▶ Sustainability and Innovation
- ▶ Cover Crops and Drought: A New Challenge
- ▶ SD Soybean Yield Contest Winners
- ▶ AgOutlook Special Feature

generation  
**SOY**



## DIRECTORS

The South Dakota Soybean Association (SDSA) represents member producers of all sizes, giving them all a strong voice in the formation of legislation and public policy that affects long-term profitability of soybean producers and the industry as a whole.

SDSA is funded in part by voluntary membership dues. SDSA is different from the SD Soybean Checkoff because SDSA has the ability to advocate on behalf of legislation. By law, checkoff dollars cannot be used for advocacy.

SDSA is governed by a board of directors elected by members. Our board includes representatives from seven districts plus at-large representatives. SDSA's goal is to be highly responsive to our members, advocating for them in all levels of government.



**JAMIE JOHNSON**  
District 7, First Vice President



**KEVIN DEINERT**  
District at Large, Second Vice President



**DERRICK SCOTT**  
District 5, Secretary



**BRENT GREENWAY**  
District 1, Treasurer



**JON SCHAEFFER**  
District 2, Director



**JEFF THOMPSON**  
District 3, Director



**CHAD SCHOOLEY**  
District 4, Director



**ARNE HARSTAD**  
District 6, Director



**JOSHUA KAYSER**  
District at Large, Director



**DREW PETERSON**  
District at Large, 2019-20 Young Leader



**JESSE KING**  
District at Large, 2019-20 Young Leader



**TAYLOR ELVERSON**  
District at Large, 2020-21 Young Leader

### SD SOYBEAN ASSOCIATION INDUSTRY REPRESENTATIVES

**DAVID RICKS**  
Corteva Agriscience

**KARI VANDERWAL**  
South Dakota Soybean Processors

**JOE SCHEFERS**  
Bayer Crop Science

**TERRY SCHULTZ**  
Mustang Seeds

### AMERICAN SOYBEAN ASSOCIATION

**KEVIN SCOTT**  
American Soybean Association President

**BRANDON WIPF**  
Director

# SDSL

SOUTH DAKOTA SOYBEAN LEADER

A publication of the South Dakota Soybean Association

Spring Issue 2021  
Volume 10 Number 1

- 3** President's Outlook
- 4** The Facts About Biodiesel
- 6** Market Research
- 7** Biologicals
- 8** Soy Industry News
- 10** Standing Up to Drought
- 12** Sustainability and Innovation
- 14** Soybean Farmers Assist with Diagnosing Condition of Rural Bridges
- 16** Cover Crops and Drought: A New Challenge
- 20** Hungry for Truth: Recipes from Local Farmers
- 24** South Dakota Soybean Yield Contest Winners
- 29** AgOutlook Special Feature







**President**

Jordan Scott, Valley Springs

**First Vice President**

Jamie Johnson, Frankfort

**Second Vice President**

Kevin Deinert, Mount Vernon

**Secretary**

Derrick Scott, Geddes

**Treasurer**

Brent Greenway, Mitchell

**Directors**

Jon Schaeffer, Viborg  
Jeff Thompson, Colton  
Chad Schooley, Castlewood  
Arne Harstad, Wilmot  
Josh Kayser, Emery  
Drew Peterson, Salem  
Jesse King, Toronto  
Taylor Elverson, Sherman

**Industry Representatives**

Dave Ricks, Corteva Agriscience  
Kari Vander Wal, South Dakota Soybean Processors  
Joe Schefers, Bayer Crop Science  
Terry Schultz, Mustang Seeds

**Editor/Design Director**  
AGE MEDIA

South Dakota Soybean Leader is published four times a year by the South Dakota Soybean Association, 5000 S. Broadband Lane, Suite 100, Sioux Falls, SD 57108 Phone: 605-330-9942. For address corrections contact South Dakota Soybean Leader at 5000 S. Broadband Lane, Suite 100, Sioux Falls, SD 57108.

Web address: [www.sdssoybean.org](http://www.sdssoybean.org)

E-mail: [sdsa@sdssoybean.org](mailto:sdsa@sdssoybean.org)

Comments and statewide news articles should be sent to the above address. Advertising space reservations must be made by the first of the month preceding publication. In consideration of the acceptance of advertisement, the agency and the advertiser must, in respect of the contents of the advertisement, indemnify and save the publisher harmless against any expense arising from claims or actions against the publisher because of the publication of the content of the advertisement.

**Advertising Information**

Garrett Gross, AGE Media  
(605) 251-6370  
[garrett@agemedia.pub](mailto:garrett@agemedia.pub)  
[www.agemedia.pub](http://www.agemedia.pub)



# PRESIDENT'S OUTLOOK

**M**y name is Jordan Scott, your new SDSA President. I want to thank past-president Jeff Thompson for his great leadership and wisdom. He has been a fantastic mentor and continues to assist me in any way he can. Thank you, Jeff.

For the past four years, I have been a director on the SDSA Board. In 2016, I was selected as South Dakota ASA/ DuPont Young Leader and awarded a seat on the SDSA board. A year later, I was elected to a three-year term as an at-large director. Ever since the day I was selected for the YL position, I have been active and engaged, even chairing a few committees. I have learned and personally grown through the strong leadership of directors on the SDSA Board and various leadership training programs. Upon being elected to this position, which comes with a lot, LOT more responsibilities, I was very humbled and honored to represent South Dakota soybean farmers.

Farm advocacy and policy are passions of mine. With the support of our outstanding board of directors, I plan to be a prominent and vocal advocate for all South Dakota soybean farmers in my term as President.

2020 was an interesting year, to say the least.

Have you said or thought any of these things? "2020 was a terrible year. 2021 HAS to be much better. It can't be any worse. What a dumpster fire the year was." I know I have. However, the more I think about and reflect on 2020, the better it looks. There were new challenges and things that happened that were weird, out of the ordinary, and downright strange. Every year has its issues, but this one felt different. There were a lot of very significant things that happened in 2020. I choose to focus on the positive things rather than the struggles and challenges.

February 2020, I decided to jump into the unknown world of YouTube and create a channel featuring our farm. My goal is to show transparency in farming practices, a little about our family, and the sustainability we have developed over five generations. You can check it out by searching Scott Family Farms on YouTube. (Shameless plug) My wife, Sam, and I celebrated five years of marriage in June of 2020. She has made me a better person, leader, and husband. As a nurse during the global pandemic, her work ethic is truly inspiring, and I really admire her.

We also had the pure joy of watching our first son, Lincoln, take his first steps. In September, my wife informed me that Lincoln will be a big brother in May of this year! We are very excited to grow our family. In December of 2020, my father was elected

President of the American Soybean Association. His hard work and selfless pursuit for the betterment of all soybean farmers is something that makes me very proud to call him my Dad. His commitment to the soybean family has helped mold me into the leader I am today, and I am very grateful for his guidance and wisdom.

I say all of this not to brag or show that I had a great year when others didn't. My point is that we all have struggles, some more impactful than others, but it's what we focus and dwell on that affects our mental health and attitude. My hope for you and your family is that you find the silver lining. If you look hard enough, you will find it in everything you do. Remember, hindsight is 2020. ■



**JORDAN SCOTT**  
District at Large, SDSA President



Jordan and Kevin Scott



# THE FACTS ABOUT BIODIESEL

By: Samantha Turner

**B**iodiesel and renewable diesel have a success story to share. However, that often gets overshadowed by common misconceptions and myths. There are many assumptions about the biomass-based diesel fuel, but rest assured, the fuel is better, cleaner, and available right now for consumption.

## BIODIESEL, A BETTER ALTERNATIVE

Biodiesel and renewable diesel are the most diverse fuels on the planet. They are made from a broad range of feedstocks, with soybean oil coming in at number one averaging more than 50 percent of the feedstocks annually. Today, biodiesel is the second largest user of soybean oil in the U.S. and its demand for soybean oil grew 300 percent in the last decade – accounting for an extra 13 percent in the soybean farmers’ pockets.

## A CLEANER CHOICE

Biodiesel reduces lifecycle emissions by 85 percent or more compared to petroleum. It reduces hydrocarbon emissions by 67 percent, lowers particulate matter by 47 percent, reduces smog and makes our air healthier to breathe.

And that’s not all. New land is not required for biodiesel production. Processing biodiesel from soybeans uses only the oil portion of the soybean, leaving available protein to nourish livestock and humans. Biodiesel creates a new market for soybean oil, increasing the availability of protein rich meal for human and livestock consumption. Leaving strong benefits for both farmers and the consumer, resulting in more affordable food.





## AVAILABLE NOW WITH PROVEN PERFORMANCE

Biodiesel and renewable diesel are a simple solution for users. They fit seamlessly with today's diesel infrastructure and can be used in existing diesel engines, storage tanks, and dispensers without modification. Typically blended with petroleum diesel at some level, biodiesel blends provide performance characteristics similar to diesel in fuel economy, horsepower, and torque while improving cetane and lubricity, which can extend engine life. No performance tradeoffs need to be made with this petroleum alternative.

However, just like gasoline and regular diesel, biodiesel does have to be properly managed. South Dakota experienced a cold winter, filled with snow covered ground and icy roads. The good news is biodiesel blends are successful in even the coldest of climates. Blends of B20 and above should be managed with similar techniques as other diesel vehicles. Blends of B5 and below have virtually no impact on cold weather operability when compared to conventional diesel fuel, which is good news for South Dakota's soybean farmers.

## JOB CREATOR, ECONOMY DRIVER

Biodiesel supports more than 60,000 American jobs. In fact, for every 100 million gallons of biodiesel that is produced – the industry creates 3,200 jobs. So, as biodiesel grows – so does its job-creating ability. Biodiesel drives economic benefits for manufacturing, service, transportation, and agriculture, to name a few, adding more than \$12 billion to the U.S. economy.

The industry has a vision to move from 3 billion to 6 billion gallons by 2030 with the help of today's and tomorrow's feedstock producers, and that won't be possible if these many successes are outshined by the stories and myths of biodiesel's past. The results are in, the facts are the facts – biodiesel is better, cleaner, and here now! ■



# CHINA BRINGS THE DEMAND BACK TO GRAINS

Provided by Tregg Cronin, Market Analyst, HALO Commodity Company LLC

In a year dominated by coronavirus, grain markets were able to take advantage of the world's largest consumer coming back to the table for imports. Spurred on by record, or near record domestic prices, China turned to the United States to help fill structural deficits in corn, soybeans and wheat. At the time of this writing, Dalian futures in China show corn at \$10.97 per bushel, No. 2 soybeans at \$17.76 per bushel and wheat near \$10.00 per bushel. These prices and the chart below help illustrate the tightening grain situation in China.

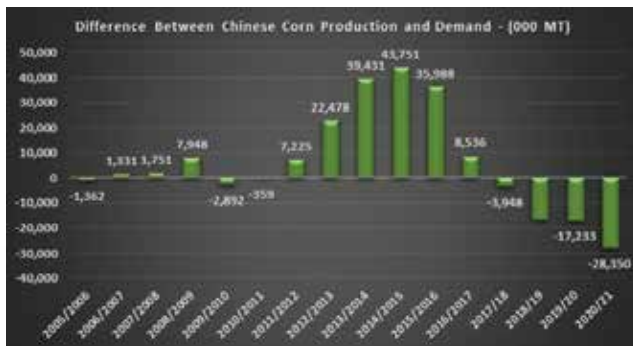


Chart showing the difference between corn production and Chinese demand.

The chart shows the difference between Chinese corn production and Chinese demand. For 2020/21, the USDA is expecting this difference to be over 28 million tons which lines up quite well with most private estimates for total corn imports. The last several years, many focused on the burdensome stocks situation in China rather than the growing demand base. Data on stocks can be somewhat opaque, and moving forward, markets will be well served paying attention to the deficit or surplus between production and demand.

As noted above, the incredible global demand is being felt across all major grain markets. The pace of demand, especially for soybeans, has been so strong through the first six months of the marketing year that USDA will be forced to increase their estimates once again as early as the March WASDE report.

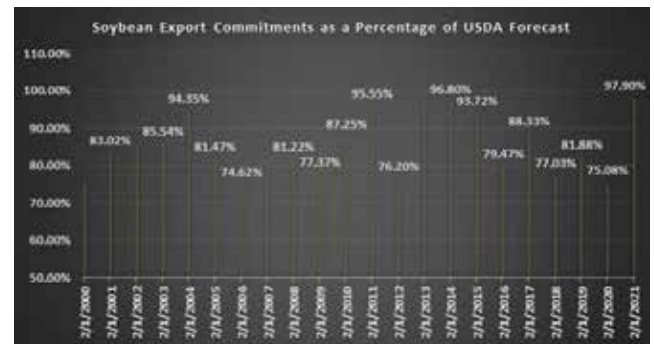


Chart showing soybean export commitments as a percentage of the USDA's current forecast.

The chart above shows soybean export commitments as a percentage of the USDA's current forecast. As of the latest available export data on February 18, this ratio currently stands at 97.9%, which is the highest on record going back to at least 1990. Actual commitments on the books total 2.202 billion bushels which would be the largest export program in history if exporters didn't sell another soybean the rest of the marketing year. Obviously additional business will be conducted the next six months making the USDA's current estimate in need of revision. This should tighten carryout stocks even further, backing the market into the proverbial corner heading into the 2021/22 marketing year. It will be absolutely crucial the U.S. farmer produces trendline yields this coming season or balance sheets get untenable rather quick.

Adding another layer of intrigue for the grain space, as if one was needed, are rising inflation expectations as governments around the world try to monetize their way out of the slow economic growth caused by the coronavirus. 5-year breakeven inflation expectations are now over 2.3% which is the highest since 2013. Demand for physical assets as a hedge against inflation is becoming a popular trade, something which should keep speculative activity in grains high. Demand from all sectors appears strong and should support grain prices as we get set to start another growing season. ■







# BIOLOGICALS

*Provided by Adam Kayser, Regional Field Agronomist at Pivot Bio*

**A**g Microbials and/or Ag Biologicals is a segment in agriculture receiving a lot of focus in recent years. This focus is due to benefits microbes can provide over synthetic chemicals. Their novelty is measured by their ability to provide modes of actions and solutions not found in other classes of ag chem. An interesting feature of microbial products is their potential to increase in number and perhaps grow and move with the growth of the crop. Their use is often associated with safety and sustainability both in their manufacture as well as placement and use in the environment.

We may not realize or fully appreciate how growers have been utilizing microbes as tools, but they have been used in agricultural production for as long as crops have been cultivated. Early farmers learned how moving soil from previously cropped fields to new fields resulted in visual differences and improvements over untreated areas. Symbiotic plant-microbe relationships have been leveraged to improve crops long before commercial fertilizer was invented. In fact the first patented microbe in the U.S. for ag production preceded anhydrous ammonia manufacturing by almost 40 years. Root nodule symbiosis, represented by legume crop's ability to fix atmospheric N<sub>2</sub> gas for plant use, is the most recognized plant-microbe symbiosis. Other symbiotic relationships, such as Plant-Mycorrhizal Fungi symbiosis, improve a plant's ability to take in water and nutrients.

Microbes have been the foundation of some of the biggest discoveries and advancements in agriculture. Farmers began using *Bacillus thuringiensis* over 100 years ago to control moth, lepidopteran, pests. Combining the tools that nature

provided, Bt parasporal crystal protein toxic to lepidopteran, with modern technologies resulted in Bt corn today. This work was foundational in paving the way for further innovations.

Navigating this industry and the quality of manufacturers can be tricky. It is important to remember that Ag Microbials are “living” cells, living cells that eat, breathe, multiply and divide. This also means that they can die. Often the most significant oversight by manufacturers comes down to packaging and storage. In agriculture, we typically use products packaged in shuttles or plastic jugs. While those containers are safe and reliable for chemicals, they may be harmful to microbial life. Living breathing organisms require packaging that allows the organisms to respire. Maybe you have seen the liquid bladders used in the soybean inoculant industry. Those specialized bladders allow for air exchange to keep the microbes alive as well as provide a barrier to prevent contaminants from entering the package. Another product concept that often appears better on paper than in practice is combining many different types of organisms in one container. While there are some organisms that may survive this procedure, many cannot. Product stewardship from manufacture to transportation to storage to use must all be monitored to maximize their efficacy.

The use of microbes in agriculture has been around for a very long time, and has been right there next to some of our greatest achievements. The advancement of Ag Microbials promises to be a valuable tool in applying next-generation practices through new science and technology. ■

## **QSSB USSEC Global Aquaculture Briefing**

by Dawn Scheier

On February 10th, USSEC hosted a Global Aquaculture Virtual Briefing for state soybean checkoff boards. During the call, USSEC provided market outlook and progress of U.S. soy aquaculture programs. Aquaculture production increased 21 mmt from 2010 to 2020, and it is on track to increase 20% between 2020 and 2025. The amount of feed required to produce fish in 2025 is projected to be more than double the amount in 2010. However, the percentage of soy use is declining. USSEC is working on increasing the overall inclusion rate of soy products in aqua feeds. Aqua feed companies and vertically integrated aquaculture operations are the buyers of soy products for use in feeds for fish and shrimp.

## **Soybean Leadership Academy**

by Ardon Wek

The 2021 Soybean Leadership Academy was held virtually January 11 & 12. We received updates from the United Soybean Board, American Soybean Association, and industry representatives including BASF, Renewable Energy Group, and FMC. Neen James spoke about leadership and interacting with an audience large or small. Todd Van Hoose, Farm Credit CEO, talked about climate change and financing for beginning and minority farmers. Matt Roberts PhD, Kernmantle Group, shared the following information: acreage will shift from corn to beans in the near future, land is where profitability is eventually accrued, there is \$13 Trillion of negatively yielding bonds globally, and the economy recovering from Covid will produce inflation. The conference was excellent and ASA President Kevin Scott did a great job of moderating.

## **NBB Conference & Expo**

by Adam Kask

From Monday, January 18th through Thursday, January 21st, National Biodiesel Board hosted their annual conference and expo. Tim Ostrem, David Struck, and Derrick Scott attended the virtual event. NBB hosted sessions on biodiesel and renewable diesel education, Bioheat, biodiesel feedstocks and sustainability, and how electric vehicles may influence the industry. There were also several discussions on the Renewable Fuels Standard and how the new administration may implement renewable fuels policies.

## **AGP Meeting**

by Jason Frerichs and Tim Ostrem

SD Soybean Directors participated in the virtual AGP annual meeting. AGP had the 3rd best financial year ever which was due to strategic business decisions along with available credit. \$185.1 million in earnings and \$146 million in patronage with 50% paid.

Grays Harbor never shut down even for a day, although the unions were not allowed to work. They quickly enacted safety programs that allowed their employees to keep working. Argentina shipments have been slow which also contributed to increased shipping out of Grays Harbor. The AGP plant in Aberdeen supplied a large portion of that demand. The refined oil segment suffered from the early effects of Covid due to restaurant demand destruction but had a profitable year in the end.

Sharing of the Biodiesel tax credit has been very helpful with their business partners. Due to the decrease in corn oil caused by lower ethanol production, more soybean oil was used in biodiesel. New railroad investments in Dawson and Aberdeen have been completed. The Aberdeen plant can bring DME (RCPE) railroad soybeans in by rail from member cooperatives and ship meal out on rail to more destinations.



# USSEC Dare to Compare Campaign Update

by Dawn Scheier

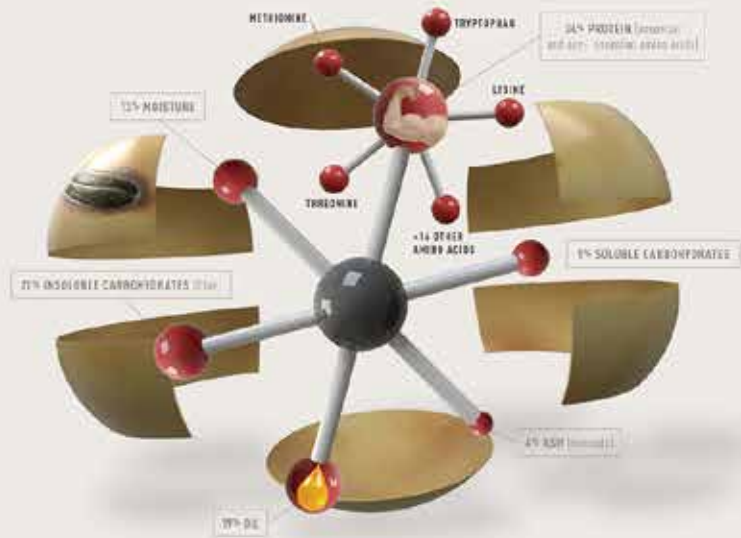
On Friday, Jan. 15, United States Soybean Export Council gave a virtual update on their Dare to Compare campaign. This campaign was created with the goal of increasing recognition and the reputation of U.S. soy compared to soy from other areas around the world, ultimately leading consumers to recognizing the benefits of U.S. soy compared to our competitors. The program focuses on science and technical based facts to show this advantage and concentrates on three core areas - nutrition, sustainability and oil.

Dare to Compare is currently scheduled to be a short-term project, however USSEC is optimistic they will be able to duplicate and improve upon the current campaign in subsequent years. Please visit the Dare to Compare website and learn more about the project. [daretocompare.ussoy.org/soybean-nutrition](http://daretocompare.ussoy.org/soybean-nutrition)

## USDA South Dakota 2020 Annual Crop Production Summary

Soybean production for 2020 totaled 224 million bushels, up 53% from 2019. Yield, at 45.5 bushels per acre, is up 3.0 bushels from a year earlier. Area for harvest, at 4.92 million acres, is up 43% from 2019. Total acreage planted is 4.95 million acres, up 41% from last year.

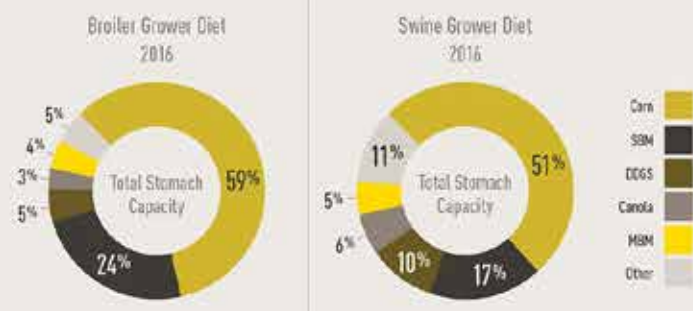
### AVERAGE U.S. SOYBEAN SEED COMPOSITION



#### TOP 5 ESSENTIAL AMINO ACIDS FOR POULTRY AND SWINE DIETS

Methionine	1	Lysine
Lysine	2	Threonine
Threonine	3	Methionine
Arginine	4	Tryptophan
Isoleucine	5	Valine

#### SHARE OF STOMACH



Other category includes fat, salt, phosphates, calcium, vitamins, minerals, crystalline amino acids.

MSM includes all essential amino acids (methionine, isoleucine, valine, threonine, tryptophan, lysine, leucine, phenylalanine, histidine, proline, arginine).

Soy composition infographic from [daretocompare.ussoy.org/soybean-nutrition](http://daretocompare.ussoy.org/soybean-nutrition).

# STANDING UP TO DROUGHT:

## No-till, cover crops build resilient soil for managing water.

By Janelle Atyeo, for the South Dakota Soil Health Coalition

**S**outh Dakota farmers slogged through two wet years before the rain shut off in the middle of the last growing season. Now a warm start to winter without much snow cover has farmers heading into the next crop year short on moisture.

Soil health practices that help to capture and provide the best use of limited moisture during dry periods are gaining popularity.

Brian Johnson farms near Frankfort in the middle of eastern South Dakota. He grows all his crops without irrigation. He can't control how much water his crops get. Instead, he has faith that no-till practices, residue cover and other soil health practices [WS-NAS1] will get his crops through dry cycles.

"When you eliminate water as a variable in whether you're going to be able to grow a crop or not, that's a huge stress relief," said Johnson, who serves on the South Dakota Soil Health Coalition board of directors.

North central South Dakota picked up a foot of snow in October, but the winter months have continued the last year's dry pattern. Selby producer and South Dakota Soil Health Coalition Board Member Doug Sieck says he's not in his comfort zone when it comes to soil moisture.

That said, his 2020 crop pulled through, and his pastures did well. It's a stark contrast from the way farmers used to talk in the 1980s.

"It was common for folks in my neighborhood, on a dry year, to make the comment, 'Well, I hope the corn gets tall enough to cut for silage,'" Sieck said.

The dynamic changed after he and many neighbors started no-till management in the 1990s, he said. Since then, only the extremely dry 2006 season saw a corn crop failure.

Sieck credits that resilience to minimal soil disturbance and better soil structure that holds moisture until plants need it.

"No-till combined with diversity in rotation are the two biggest tools that decreased our drought risk," he said.

Sieck knows the importance of having a drought plan in place that gives him options if dry conditions persist.

He and the Johnsons have spent decades building resilient soils, but skipping the tillage pass in a dry cycle can have immediate benefits on any field.

"Don't do anything to promote water evaporation," advises Anthony Bly, soils field specialist with South Dakota State University Extension.

Where a tilled field might readily absorb water, it does so for only a brief time before silty particles create a hard crust that water can't penetrate. Leaving the soil undisturbed and adding diversity lets a healthy community of microbes create soil structure that will allow water to infiltrate, which is ultimately what makes soil more resilient.

"The no-till helps. You're not down in there tearing their house apart," Sieck said.

Undisturbed soil and residue from the previous crop build organic matter, which is important for water storage, Bly added. On the surface, residue creates a sort of armor that helps reduce evaporation and erosion.

Cover crops can do even more to help. They keep a living root in the soil past harvest time. They feed the microbiome that's at work underground building healthy soils and add a diversity of rooting patterns, Bly explained. Soybeans have a taproot, corn roots are





*These two photos were taken in fields across the road from each other. Tilled soil on the left is powder dry. No-till soil on the right with ample residue cover has enough moisture to squeeze liquid out of a soil ball in the hand.*

fibrous, and small grains are fibrous but more distributed. Cover crops fill in a gap there, Bly said.

Sorghum Sudan grass is good summertime cover, according to agronomist Dale Strickler, who works with Green Cover Seed in south central Nebraska and has written the books “Managing Pasture” and “The Drought-Resilient Farm.”

“Sorghum Sudan has more biomass above ground and below ground than any other annual crop,” he said, adding that it will generate more pounds of forage than anything else for producers looking to supplement livestock feed.

It’s hard to beat the growth cereal rye and triticale cover crops can put on in the winter months, he said, and they have massive root systems.

Those roots make pathways – macropores – where water can filter through the soil. Pores need to be open to the soil surface to get the benefit of water infiltration, Strickler said. Tillage closes those pores.

He equates it to snorkeling: “There’s a big difference between having your snorkel above or below the surface.”

Last year’s dry conditions kept Bly from planting many cover crops after corn and soybeans on his southeastern South Dakota farm. He didn’t want them using any moisture reserves he’d need for his next cash crop; although, he did plant covers after his wheat and oats were harvested.

Understanding your soils and their water holding capacity is important to planting plans. It’s like managing your bank account, he said.

Cover crops are an investment. Starting out is tough, especially in a dry period, Strickler said, but it pays off in subsequent years with better infiltration, better water holding capacity and less evaporation.

A typical cover crop leaves an average 1.5 inches less moisture at termination, according to several studies, Strickler said.

“It only takes one good rain to replenish that inch and a half,” he said. “The cover crop soil usually catches up very rapidly, and once caught up, you stay ahead.”



*Dale Strickler displays soil from two fields. The one on the left has been tilled since shortly after the Civil War. The other has been no-tilled and cover cropped for 25 years.*

Strickler believes farmers can do a better job of using the resources they already have. He recalled driving through southwestern Kansas during the drought year of 2012. He saw a tractor at work feeding hay bales on a buffalo grass pasture that was nothing but dirt. On the other side of the fence was a sprayer knocking out 3-foot pigweeds and crabgrass in the wheat stubble. There were about 3 tons per acre of nutritious feed out there, he estimated, but producers aren’t used to looking at weeds and stubble as potential feed sources.

“Thousands of dollars could be saved by opening a gate,” he said.

Johnson, the farmer from Frankfort, said there are resources for producers looking to learn more about how to improve their operation’s ability to withstand weather extremes. The South Dakota Soil Health Coalition website at [www.sdsolhealthcoalition.org](http://www.sdsolhealthcoalition.org) has a Healthy Soils Handbook that serves as a technical resource. You can also connect with experienced producers throughout the state by tapping into the Mentor Network.

“We’ve got lots of resources there so you’re not starting from square one,” Johnson said. ■

# SUSTAINABILITY AND INNOVATION:

## Agriculture In 2021 And Beyond



Liam Condon, member of the Bayer AG Board of Management and president of the Crop Science division, joined the soy checkoff's annual meeting to share his perspective on a post-COVID-19 future.

“Our base hypothesis is, we believe agriculture can feed a growing population without starving the planet,” said Condon. “Because of how resilient farmers are and the benefits of innovation, we can simply do things in a better manner going forward.”

The best way to go forward? *Innovation.*

### INNOVATION

“Over millennia, we’ve had different transformations in agriculture,” said Condon. “A lot is driven by technology — machinery, fertilizers, biotech seeds. The next transformation in ag is going to be based on data, based on the digital transformation.”

Condon said this digital transformation in agriculture allows farmers to make more informed decisions and adjust in real time. Sensors on equipment and on the ground or satellites in the sky allow farmers to bring their data to life in an entirely new, real-time way.

“The great thing about digital tools is that they allow us to work in a more precise manner than was ever before possible,” he said. “This opens up entirely new opportunities that will benefit agriculture going forward.”

According to CropLife’s Precision Agriculture Dealership Survey, from 2002 to 2013, only about half of dealers were offering variable rate (VRT) fertilizer applications. That number increased to 69% in 2015 and to 81% in 2019 and is now at 89%. VRT seeding recommendations also made a jump from 24% in 2013 to 69% in 2020.

While farmers look at ways to innovate, they also look at ways to be sustainable.

### SUSTAINABILITY

It’s estimated that soils can sequester around 20 petagrams of carbon in 25 years — more than 10% of emissions created by humans through sectors like energy or transportation, according to the Food and Agriculture Organization.

“If you think about agriculture, it’s one of the few industries in the entire world where you can actually sequester carbon in the soil,” Condon said. “You can actually make ag part of the

solution to this challenge of reducing greenhouse gas emissions.”

Condon said that Bayer has been working for years to develop and validate a transparent, science-based and collaborative approach to a carbon market in agriculture. In the 2020-21 season, 1,200 farmers in Brazil and the U.S. are participating in the program where they are being assisted in implementing climate-smart practices and guided in carbon measurements.

“There is an unmet demand for carbon offsets. With no-till and other agronomic practices, farmers are already sequestering carbon. Let’s find a model that rewards farmers for this,” he said. “If we can embrace this, it’s a huge business opportunity.”

With sustainability in mind, the checkoff and soy partner organization introduced the U.S. Soybean Sustainability Assurance Protocol to demonstrate the sustainability of U.S. soy to international and domestic customers.

The protocol is based on existing aggregated data collected from farmers nationwide who participate in national conservation programs. The information serves as proof that the U.S. soy crop is produced under a system of sustainability that includes everything from water conservation to energy use.

With new ideas that rely on an interconnected digital platform comes the need for reliable rural broadband.

### RURAL BROADBAND

“For new digital innovations to function, farmers need access to rural broadband,” Condon said.

He cited his travels to China, recalling how even in the middle of the most remote field, he had fast and reliable internet access.

“It’s a real problem — the U.S. lacks sufficient rural broadband connectivity,” he said. “There are many underdeveloped parts of the world that have significantly better access to broadband.”



Last year, a study commissioned by the soy checkoff revealed the lack of access to broadband in rural areas takes a significant toll on American farmers and the economy.

The checkoff initiated the rural broadband study to better understand how and why farmers currently access the internet, including the implications access has on farm business decisions, economic viability and overall sustainability. According to “Rural Broadband and the American Farmer: Connectivity Challenges Limit Agriculture’s Economic Impact and Sustainability,” an alarming 60% of U.S. farmers say they do not have enough connectivity to run their businesses.

Data from the USDA Economic Research Service indicates farming contributes to nearly \$133 billion of our country’s gross domestic product. Based on the checkoff’s rural broadband survey, the lack of connectivity negatively impacts farmers who are responsible for \$80 billion of gross domestic product.

“If we don’t get the U.S. up to speed on this, it will become a competitive disadvantage,” Condon said.



### CONSUMERS AND FARMERS LOOKING FORWARD

The underlying future trend is that consumers are becoming more and more interested in not just what they eat, but also in where their food comes from and how it’s produced.

“In the past, I think food companies were willing to take everything from the farm by and large as long as it was healthy and safe. But now, food companies are setting more and more

requirements according to consumer preferences,” said Condon. “This ultimately ties back to the farm — not just what is produced but how things are produced.”

Condon continued to remind the farmer-leaders of the checkoff that bridging the gap between farm and table is a team effort. The entire ag industry must work together to show consumers why innovation and sustainability are important to them and result in a healthier and more sustainable product for consumers.

Condon said, “Transparency is the currency of trust.” ■



**PROBABLY SAFE TO SAY THAT FARMERS LIKE A GOOD DOG**

**EVEN MORE THAN A GOOD BANKING AD.**



FIRSTDAKOTAAG.COM

So just imagine you’re scratching this good dog’s ears while you’re freeing up some cash every month with a Dakota MAC thirty-year fixed-rate loan. We’re happy to be your second-best friend.



# SOYBEAN FARMERS ASSIST WITH DIAGNOSING CONDITION OF RURAL BRIDGES

By Mike Steenhoek

According to the **American Road and Transportation Builders Association**, of the 5,821 bridges in South Dakota, 991, or 17%, are classified as structurally deficient – the fourth highest percentage in the country. Moreover, South Dakota has the tenth highest ranking in the percentage of the state’s bridge decks designated as structurally deficient.

A “structurally deficient” designation does not convey that the bridge is an immediate risk to public safety, but rather that the bridge has been identified with damage to one of the key components that, if not corrected, could worsen and become a safety concern in the future. While South Dakota has made recent progress on reducing the number of structurally deficient bridges, much work remains.

**S**outh Dakota farmers rely upon a system of rural bridges to effectively deliver their soybeans or other commodities to the local elevator or processing facility – often serving as the first step in a journey to a customer halfway around the world. A well-maintained rural bridge inventory is therefore essential to farmer profitability.

Unfortunately, a considerable number of rural bridges in South Dakota are load restricted, requiring vehicles transporting agricultural commodities to detour – often at significant distances. This results in additional costs being inserted in the nation’s food delivery system and diminished profitability for South Dakota farmers. While the need to maintain and upgrade rural bridges is on the increase, available resources to address this challenge remain insufficient.

In an effort to promote better evaluation and management of the state’s rural bridges, the Soy Transportation Coalition (STC) has been promoting an innovative project designed to demonstrate the effectiveness of load testing technology when assessing the load carrying capacity of rural bridges.

The focus of the project is to evaluate bridges utilizing load testing sensors attached to the underside of the bridge. After the sensors are installed, test loads are driven over the various segments of the bridge surface to determine a precise understanding of the capabilities of the bridge. Half of the up-front costs of the project is provided by the STC. Successful projects have already occurred in Iowa, Kansas, and Michigan. Conducting a similar project in South Dakota is being explored.

“Since we and our families utilize rural bridges on a routine basis, safety will always be most important,” says Todd Hanten, a soybean farmer from

Goodwin, South Dakota, and director on the Soy Transportation Coalition. “We appreciate the South Dakota DOT, county highway superintendents, and others for ensuring a safe system of rural bridges for the public. We hope to be able to conduct a bridge load testing project in South Dakota since that will result in a more thorough understanding of which bridges are most in need of repair and which ones can safely handle trucks transporting soybeans or other products important to our state economy.”

On December 10th, Van Buren County in southeast Iowa partnered in this project to test several rural bridges that had been originally assessed with load restrictions. Each bridge had been load-limited due to a concern based on the traditional approach of a visual inspection and theoretical calculations to determine a bridge’s load carrying capacity. However, after evaluating the bridges via load testing sensors, the load restriction on one bridge (25 tons) was able to be safely removed – allowing it to accommodate legal loads. Two other bridges – one with a seven-ton load restriction and the other with an eleven-ton load restriction – were also evaluated. After performing the load testing with the sensors, the postings were increased to 17 and 24 tons, respectively. Additional load testing of bridges in Van Buren and a number of other Iowa counties is being planned for spring and summer of 2021.

“South Dakota soybean farmers will continue to support additional funding for rural bridges throughout the state,” says Hanten. “However, the STC’s bridge load testing project demonstrates that we can increase understanding of the condition of these bridges, which will decrease the number of restricted bridges while also directing taxpayer dollars more effectively. I am hopeful such a project can occur in South Dakota in the near future.” ■

*Established in 2007, the Soy Transportation Coalition is comprised of the South Dakota Soybean Research and Promotion Council, twelve other state soybean boards, the American Soybean Association, and the United Soybean Board. The goal of the organization is to position the soybean industry to benefit from a transportation system that delivers cost effective, reliable, and competitive service.*





WE ARE U.S. SOYBEAN FARMERS



## SUSTAINABILITY NEVER GOES OUT OF SEASON

---

### DECISION FARMING

---

**Customers prefer U.S. soy because it's sustainable.** But demands for sustainability continue to rise. Making informed management decisions by using data from all aspects of your operation helps minimize inputs and maximize yields. Adopting this practice is another step forward in improving your sustainable footprint. See why sustainability never goes out of season at [unitedsoybean.org](http://unitedsoybean.org).







# COVER CROPS & DROUGHT:

## A new challenge

**C**over crops have been a big success in recent years. The weather has been wet and cover crops have helped use up excess moisture, shrink saline areas, reclaim Prevent Plant acres, increase soil organic matter, kickstart soil biological life and much more.

But now it is dry. Nearly all of South Dakota is in extreme, severe or moderate drought as this is being written. The remainder of the state is categorized as “abnormally dry.” The drought is likely to persist through the spring and perhaps even for much of the year in some places, according to the latest projection from the Climate Prediction Center.

Drought presents a new challenge in managing cover crops, says Jason Miller, USDA Natural Resources Conservation Service South Dakota area agronomist. Three key questions when it is dry are:

- When to terminate cover crops before planting corn, soybeans and other row crops.
- What to plant if you need forage for livestock because there’s not enough grass.
- Whether or not to plant cover crops again in the fall.

### TERMINATION TIMING

Bryan Jorgensen, Ideal, has a game plan for terminating cover crops. He has been using cover crops for about 10 years and is a founding member of the South Dakota Soil Health Coalition.

In wet years he likes to plant green, terminating cover crops right before or after planting corn and soybeans. When soils are wet, row crops plant better with a living root system in the soil, he says.

This year, though, if it is dry in April and soil moisture levels are still low, he will kill the cover crops several days or weeks before planting so the seed doesn’t have to compete with the cover crop for scarce moisture.

Cover crops have proven to be an excellent moisture management tool, notes Anthony Bly, South Dakota State University Extension soils field specialist, “and it is critical this year that we know when to turn them off.”



## FOR CROPS

Cover crops planted in May and June for supplement forage should include some warm season grasses like sorghum, sudangrass and millet as these will produce more during the warm part of the summer, says Ruth Beck, SDSU Extension field specialist.

If a legume component is needed, consider cowpeas and/or forage soybeans. To extend the life of the cover crop into the fall, producers can add oats, triticale, wheat and a cool season legume species such as peas or lentils. Other crop species may also be included in the mix such as sunflowers, flax and brassica species, she advises.

## AUGUST ANGST

The drought's intensity will drive most decisions about whether or not to plant cover crops after small grains this year. It is usually dry in late summer and cover crops after often planted in anticipation of moisture.

"Each operation's going to be different as to how they handle risk," says Miller, of the NRCS, who has served a large area of eastern and central South Dakota. "Some operations are willing to spend the additional money to put seeds in the dry soil on the hope they get moisture."

Unless it is "ungodly dry," Jorgensen will seed cover crops again this year.



Bryan Jorgensen talks about growing corn during a field day held at his farm. Photo: USDA NRCS South Dakota



Chad Schooley creates fall and winter grazing with cover crops. Photo: USDA NRCS South Dakota.



# If you can smell it, it's too late.



## TSGC



Call today for conversation  
without obligation.  
712-336-0199

Text TSGC to 72727 to receive grain storage  
tips and information.

### Customized Grain Monitoring Systems

### Tri-States Grain Conditioning, Inc.

Spirit Lake, Iowa TSGC@TSGCinc.com www.TSGCinc.com



John Shubeck farms with his wife, Megan. They are pictured with their children. Photo: USDA NRCS South Dakota.

He also plans to continue experimenting with interseeding cover crops in soybeans and silage corn during the summer, even though covers will use some moisture to get established.

“I’m more worried about soil loss than moisture loss,” Jorgensen says.

There’s little residue left behind after combining soybeans or chopping silage. “As soon as we fall behind [in maintaining surface residue and living root in the soil], the soil system starts degrading,” he says.

Arnie Harstad, farms at Wilmot, and also is a crop consultant and a South Dakota Soybean Association director. He puts himself in the “less accepting of risk” category when it comes to seeding cover crops in dry weather. That’s partly because he farms in northern South Dakota where a frost can come soon after small grains are harvested and cover crops are planted. He also doesn’t have livestock to graze cover crops.

If there’s time to plant cover crops and there’s enough moisture available to get them started, Harstad will try to increase his odds of success by reducing the seeding rate 25%; cutting the cover crop mix from five to six species to three to four, focusing on the easiest germination and fastest growing types; and using a drill to get the seed in good contact with the soil so that it will germinate faster.

“The good thing about cover crops,” he says, “is that there are so many options.”

But if it is too dry and/or too late in the season to get a decent cover crop stand established before a hard freeze, he won’t put the seed in the ground.

Chad Schooley, Castlewood, also an SDSA director, is more inclined to seed cover crops even if it is dry because he has livestock. He seeds a mix of frost tolerant turnips and radishes into volunteer oats to produce forage that his cattle graze throughout the fall and winter.



It’s surprising how much some cover crops can grow in the late fall if they get a little rain, he says. “I’ll definitely be ready to plant cover crops this year.”

### STILL OPTIMISTIC

John Shubeck, Centerville, is keeping cover crops in his plans, even though his farm is in the middle of one of the driest areas of the state. His average annual rainfall is about 26 inches. Only 14 inches fell last year. The drought category is rated “extreme.”

“I haven’t seen any local research that shows yields will be any less with cover crops than without cover crops in a long-term no-till system with a diverse rotation like I have,” he says. “Cover crops seem to conserve as much more as they use.”

There is some science behind the observation. Kris Nichols, a soil microbiologist who formerly worked with the USDA in Mandan, N.D., says it is because of the soil micro-organisms. A green, living cover crop feeds the micro-organism web in the soil much better than crop residue on the surface. Those organisms help form soil aggregate which increase the pore space between soil particles for water to flow through.

Another reason Shubeck plans to stick with cover crop is a philosophy that has served his family’s farm well, even in worse situations than today’s drought. The farm has been in the family for 147 years and Shubeck is the fifth generation to operate it.

“My dad always said, ‘Don’t try to outguess the markets or the weather. Stick with the plan.’”

It could start raining anytime and the drought may fade into the history books. Shubeck figures cover crops will help him make the most of whatever the weather brings in 2020. ■

### SOURCES:

**BRYAN JORGENSEN**  
605-840-9005  
bryan@jorgensenfarms.com  
bit.ly/SoilHealthProfile  
bit.ly/JorgensenSoilStory  
bit.ly/MeritorMythJohnson

**JOHN SHUBECK**  
605-553-1094  
elof00@yahoo.com

**CHAD SCHOOLEY**  
SDSA District 4 Director  
cschooley@sds soybean.org

**ARNIE HARSTAD**  
SDSA District 6 Director  
aharstad@sds soybean.org

**JASON MILLER**  
605-280-1055

**ANTHONY BLY**  
anthony.bly@sdstate.edu



COVER CROP Common Species and Properties																					
	Full seeding rate lbs/acre/4	Seeding depth, inches	Average cost/LB.	Reduce erosion	Increase soil organic matter	Scavenge nutrients	Promote biological nitrogen fixation	Suppress weeds	Provide supplemental hay	Provide supplemental grazing	Rooting depth/Plant water use /1	Minimize/ Reduce surface soil compaction	Minimize/ Reduce subsoil compaction	Seed size (Large or Fine)	Crop type and seeding dates /2 /3	Winter Survival	Salinity Tolerance	C:N Ratio	Mycorrhizal fungi association	Seeds/lb	Shade Tolerance
Alfalfa	6.5	.25-.75	\$1.90	G	G	G	Y	G	G	F	DH	G	G	F	CB	Y	P	L	M	210,000	F
Barley	50	.75-2.0	\$0.30	G	G	G	N	G	G	F	MM	G	F	L	CG	N	G	M	M	14,000	F
Brassica Hybrids	7	.25-.50	\$2.77	F	F	G	N	G	F	G	MM	G	G	F	CB	N	G	L	N	180,000	P
Buckwheat /5	50	.50-1.5	\$0.86	P	P	F	N	F	P	P	SL	F	P	L	WB	N	P	L	N	19,000	G
Cabbage, African	5	.25-.75	\$4.50	F	F	G	N	F	F	F	MM	G	G	F	CB	N	G	L	N	180,000	F
Camelina, Winter	3	.25-.50	\$2.24	F	F	F	N	P	P	P	ML	P	F	F	CB	S	P	L	N	400,000	P
Canola	5	.25-.75	\$4.25	F	F	G	N	G	F	F	MM	G	G	F	CB	S	G	L	N	140,000	F
Clover, Balansa	5	.25-.75	\$2.52	F	P	F	Y	P	P	F	SL	P	P	F	CB	N	P	L	M	500,000	F
Clover, Crimson	15	.25-.75	\$1.45	F	F	F	Y	P	F	F	SM	P	P	F	CB	S	P	L	M	150,000	F
Clover, Red	5	.25-.75	\$1.94	G	F	F	Y	F	F	F	SL	F	F	F	CB	Y	P	L	M	275,000	G
Clover, Sweet	4	.25-1.0	\$1.85	G	G	F	Y	G	F	F	MM	G	G	F	CB	Y	F	L	M	260,000	G
Collards or Kale	5	.25-.50	\$3.20	F	F	G	N	G	F	G	MM	G	G	F	CB	N	G	L	N	175,000	F
Corn	12	1.0-1.5	\$2.80	G	G	G	N	G	F	G	DH	G	G	L	WG	N	P	H	H	2,500	F
Cowpeas or Dry Beans	30	1.0-1.5	\$1.32	P	F	F	Y	P	P	F	SL	F	F	L	WB	N	P	L	M	4,000	F
Fava Beans	75	1.0-1.5	\$0.67	F	F	F	Y	F	G	G	DM	F	F	L	CB	N	F	L	P	2,500	P
Flax	30	.25-.75	\$0.59	F	F	F	N	P	P	P	SM	F	P	F	CB	N	P	H	H	80,000	P
Lentils	30	1.0-1.5	\$0.74	P	P	P	Y	P	P	P	SL	P	P	F	CB	N	P	L	M	20,000	P
Millet, Hay	15	.50-1.0	\$0.77	G	G	G	N	G	G	G	SL	G	F	F	WG	N	P	M	H	180,000	P
Millet, Proso	25	.50-1.0	\$0.77	G	G	G	N	G	G	G	SL	G	F	F	WG	N	P	M	H	80,000	P
Mustard	6	.25-.75	\$2.93	F	F	F	N	G	F	P	MH	G	F	F	CB	N	P	L	N	140,000	P
Oats	70	.50-1.5	\$0.33	G	G	G	N	G	G	G	MM	G	F	L	CG	N	F	M	H	16,000	F
Peas	70	1.5-3.0	\$0.44	F	P	P	Y	F	G	G	SL	F	F	L	CB	N	P	L	M	3,500	F
Phacelia	4	.25-.50	\$6.92	F	F	F	N	P	P	P	DH	F	P	F	CB	N	P	L	M	225,000	F
Radishes	8	.25-.75	\$1.66	F	F	G	N	G	P	G	DH	G	G	F	CB	N	P	L	N	25,000	P
Rapeseed	5	.25-.75	\$1.05	F	F	G	N	G	F	G	MM	G	G	F	CB	Y	G	L	N	140,000	F
Rye, Cereal	60	.75-2.0	\$0.22	G	G	G	N	G	G	G	MH	G	G	L	CG	Y	G	H	M	18,000	G
Ryegrass, Annual	15	.50-1.5	\$0.91	G	G	G	N	F	G	G	MM	G	F	F	CG	S	F	M	M	190,000	G
Safflowers	30	.50-1.0	\$1.09	F	F	G	N	F	P	P	DM	F	G	L	WB	N	F	M	M	15,000	P
Sorghum, Forage and Sudan Hybrids	15	.50-1.5	\$1.40	G	G	G	N	G	G	G	MM	G	G	L	WG	N	F	M	H	17,000	P
Sorghum, Grain	5	.50-1.5	\$1.23	G	G	G	N	G	G	G	MM	G	G	L	WG	N	F	M	H	17,000	P
Soybeans	35	1.0-1.5	\$0.52	F	P	F	Y	F	F	F	SM	F	F	L	WB	N	P	L	M	3,500	F
Sudangrass	20	.50-1.5	\$1.05	G	G	G	N	G	G	G	MM	G	G	L	WG	N	F	M	H	25,500	P
Sugar Beets	4	.25-.50	\$4.46	F	P	G	N	F	P	G	DH	G	G	F	CB	N	G	L	N	22,000	P
Sunflowers	7	.50-1.0	\$0.52	F	F	G	N	F	P	G	DM	F	G	L	WB	N	F	M	M	8,000	P
Sunn Hemp	15	1.5-2.0	\$2.72	F	F	F	Y	F	P	F	DM	F	F	L	WB	N	P	L	M	15,000	P
Teff Grass	5	.13-.25	\$2.43	G	G	F	N	F	G	G	SM	G	F	F	WG	N	P	M	H	1M	N
Triticale	60	.50-1.5	\$0.37	G	G	G	N	G	G	G	MH	G	F	L	CG	Y	G	M	M	15,000	F
Turnips	4	.25-.50	\$1.68	F	P	G	N	G	P	G	DH	G	G	F	CB	S	P	L	N	175,000	P
Vetch, Chickling	50	.50-1.5	\$1.47	F	F	F	Y	F	F	P	SL	F	F	L	CB	N	P	L	M	2,500	F
Vetch, Common	25	.50-1.5	\$1.23	F	F	F	Y	F	F	G	SM	F	F	L	CB	N	P	L	M	8,000	F
Vetch, Hairy	15	.50-1.5	\$2.33	G	F	F	Y	F	F	F	SM	G	F	L	CB	Y	P	L	M	14,000	G
Wheat, Spring	60	.50-1.5	\$0.26	G	G	G	N	G	G	G	MH	G	F	L	CG	N	G	M	M	15,000	F
Wheat, Winter	60	.75-2.0	\$0.25	G	G	G	N	G	G	G	MH	G	F	L	CG	Y	G	M	M	15,000	F

**1. Water Use / Rooting Depth**

SL: Shallow rooted / Low water use  
 SM: Shallow rooted / Medium water use  
 SH: Shallow rooted / High water use  
 ML: Medium rooted / Low water use  
 MM: Medium rooted / Medium water use  
 MH: Medium rooted / High water use  
 DL: Deep rooted / Low water use  
 DM: Deep rooted / Medium water use  
 DH: Deep rooted / High water use

Shallow: 6-18 inches  
 Medium: 18-24 inches  
 Deep: 24+ inches

**2. Crop Types**

CG: Cool season grass  
 CB: Cool season broadleaf  
 WG: Warm season grass  
 WB: Warm season broadleaf

**3. Ratings**

L: Low  
 M: Medium  
 Y: Yes  
 N: No  
 S: Sporadic  
 N/A: Not Applicable  
 G: Good  
 F: Fair  
 P: Poor

**4. Seeding Dates**

May 1 through August 5 - Warm season winter kill species

Early spring through August 20 - Cool season winter kill species

August 1 through Winter - Species that do not winter kill

Seeding dates fluctuate annually. Seeding dates may be adjusted up to 15 days by the District Conservationist, based on local weather and site conditions.

**5. Full Seeding Rates**

Multiply by the percent desired if mixtures are used.

**6. Buckwheat Contamination**

To reduce chances of buckwheat contamination in wheat do not rotate to wheat for grain for 2 years.



# Hungry for Truth



## PIZZA BURGERS

Servings: 6

### INGREDIENTS

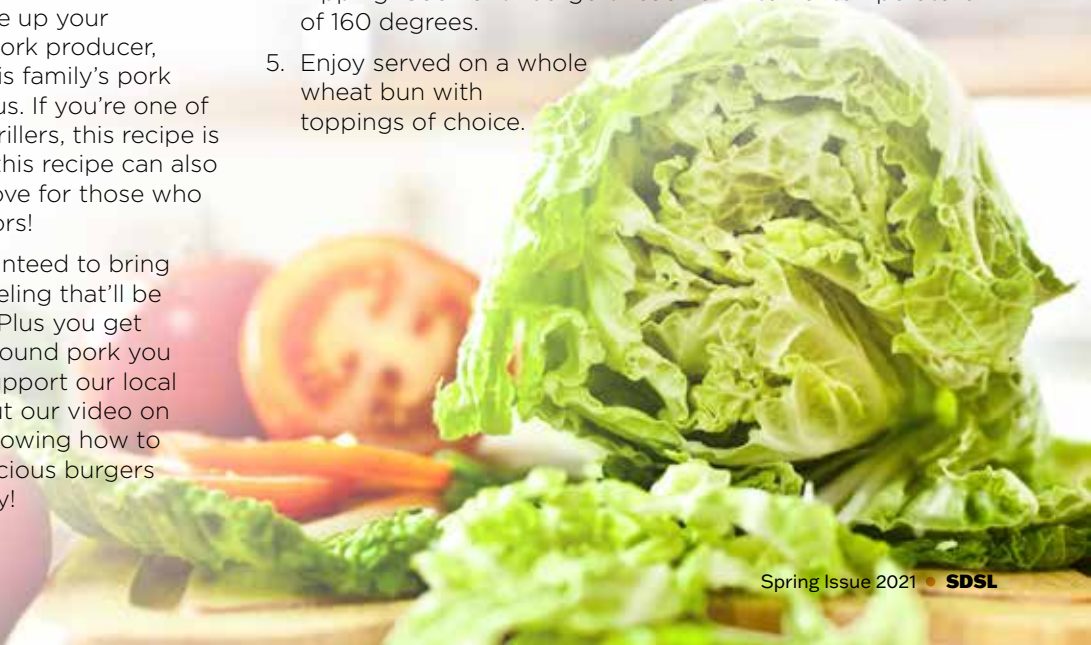
- 1 lb ground beef, thawed
- 1 lb ground pork, thawed
- 1/2 c shredded cheese of choice (cheddar or pizza blend is best)
- 1/2 c pizza sauce
- 1/3 c quick oats or breadcrumbs
- 1 tsp Italian seasoning (if using unseasoned ground pork)
- 10-15 pepperoni slices, diced

### INSTRUCTIONS

1. Preheat grill or warm up large frying pan.
2. In a large mixing bowl, combine all ingredients until blended evenly.
3. Form burger mixture into six patties. Place burger patties on grill or pan.
4. Allow burgers to cook for about 4-5 minutes before flipping. Cook until burgers reach an internal temperature of 160 degrees.
5. Enjoy served on a whole wheat bun with toppings of choice.

Looking for a way to spice up your burgers at home? Local pork producer, Brent Greenway shared his family's pork pizza burger recipe with us. If you're one of our brave cool-weather grillers, this recipe is for you. But don't worry, this recipe can also be made inside on the stove for those who prefer to stay warm indoors!

This pizza burger is guaranteed to bring back that summertime feeling that'll be back before you know it. Plus you get to use up some of that ground pork you have in the freezer and support our local pork producers. Check out our video on [hungryfortruthsd.com](http://hungryfortruthsd.com) showing how to make these easy and delicious burgers the whole family will enjoy!







## EASY SHRIMP AND VEGGIE PASTA FRESCA

### INGREDIENTS

- 3 Tbsp soybean oil commonly labeled as vegetable oil
- 3 cloves garlic chopped
- 1 lb shrimp peeled and deveined (30-35 shrimp per pound)
- 1 lemon juiced and zested
- 1/2 tsp red pepper flakes
- 1 carrot cut into matchstick-sized pieces
- 3/4 c edamame shelled and thawed
- 1 red bell pepper cut into 1-inch squares
- 1 c cherry tomatoes halved
- 8 oz farfalle or bowtie pasta cooked according to package directions
- 1/4 tsp sea salt
- 1/4 tsp black pepper fresh
- 1 Tbsp parmesan cheese shredded
- 1 Tbsp Italian parsley chopped

### INSTRUCTIONS

Heat soybean oil in a large skillet over medium high heat. Add garlic and cook for 2 minutes, stirring occasionally. Add shrimp, lemon juice and red pepper flakes. Cook for 2 to 3 minutes, stirring frequently, until shrimp is pink and cooked through. Add carrots, edamame, bell pepper and tomatoes. Cook, stirring frequently, until the carrots are tender. Add pasta, salt, pepper, cheese, parsley and lemon zest. Cook, tossing gently, until thoroughly heated. Top with Parmesan cheese, if desired.

Soybeans are an incredibly versatile crop. Take the ingredients in this recipe for instance: Edamame is a soy variety. Soybean oil is the most popular oil in the U.S. Dairy cattle eat soy for milk and Parmesan cheese production, and did you know that soy is a top protein source for many aquatic shrimp farms?

We all want to make the best food choices for our families. Fortunately, there are so many safe and healthy food choices available. Organic or conventional: Both food production methods provide safe, nutritious food. You can hear more about food labels from a registered dietitian on our blog. This colorful and healthy recipe can be tossed together quickly and is guaranteed to please a wide variety of palates.

See dozens of unique recipes at [SoyConnection.com](http://SoyConnection.com).





# SUPPLYING A GROWING SOYBEAN APPETITE

**M**idwestern farmers enjoyed a tremendous soybean rally in late 2020 and early 2021. The price runup was largely attributed to strong global demand for soybeans.

Mustang Seeds CEO Terry Schultz is among the industry leaders who expects the world's appetite for soy to remain strong.

"I am very encouraged about the increase in global demand for soybeans, and quite specifically, the demand that China now has," Schultz says. "China is rebuilding their hog herd and they're realizing that they need soybean meal to grow those hogs. We look for this demand to continue for a number of years. That helps us as an industry to put more money into research and development of new and better yielding genetics for growers. We do see a bright future for soybeans in the United States."

Schultz says grower sentiment has changed a lot over the course of the year because commodity prices climbed thanks to those strong export sales. Not only are farmers across the Dakotas and Minnesota planning to plant more soybean acres in 2021, many growers are also opting to enhance their seed purchases to get the most out of their investment.

"We're seeing farmers increasing their soybean acreage and investing more in their seed crop for 2021. We have more growers looking at seed treatments on soybeans for nematodes and sudden death products as well," Schultz explains. "When the soybean price was \$8, there was a diminished rate of return that growers viewed on those products. We've seen an increase in growers moving up to take care of soybean cyst nematode and sudden death syndrome in soybeans via seed treatments."

## WEATHER FACTOR

Strong demand for U.S. soy products has driven the spike in soybean prices, but weather in South America is another factor working in the farmer's favor. Dry conditions in parts of Argentina impacted the size of the Argentine crop. Late harvest in Brazil is pushing global customers to purchase U.S. soybeans later in the marketing year than is typical.

Seed companies like Mustang Seeds sometimes grow seed soybeans in South America to bring back to the U.S. for the coming year. Schultz says that despite some spotty dry conditions in Argentina, Mustang Seeds' production was largely unscathed. He says Mustang will have the seed necessary to meet the needs of farmers in South Dakota, North Dakota and Minnesota, including XtendFlex<sup>®</sup>, the new Enlist E3<sup>™</sup> lines and even some exclusive non-GMO lines.

"Mustang offers a wide range of seed, but the Xtendflex<sup>®</sup> and Enlist E3<sup>™</sup> are the two main platforms that growers are going for," Schultz explains. "Both of those platforms have three modes of herbicide tolerance. From a weed resistance standpoint, three modes of action are what is preferred so that we do not build up weed resistance. Both Xtendflex<sup>®</sup> and Enlist E3<sup>™</sup> give growers the ability to change up their chemistries."

Giving farmers soybean seed options that fit their operations is a hallmark of the Mustang Seeds brand. Schultz says that commitment is vital to help farmers respond to market opportunities.

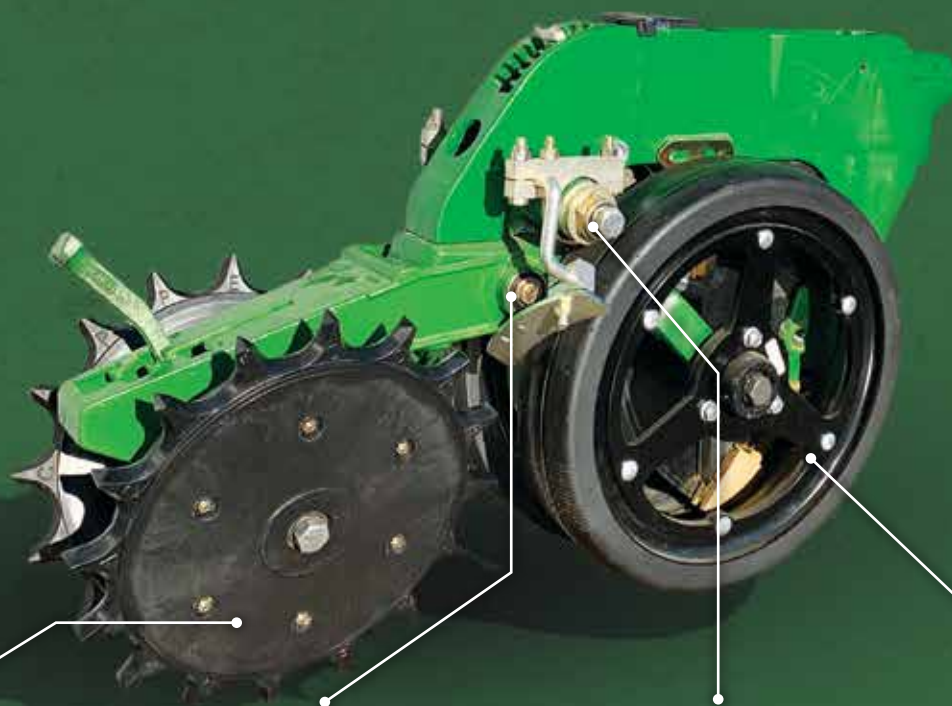
"We are continuing our research and working to bring our exclusive products to our growers as quickly as we can," Schultz says. "The continued global demand shows that we have a need for increasing productivity in soybeans."



To learn more about what Mustang Seeds has to offer, visit [www.mustangseeds.com](http://www.mustangseeds.com).

Copperhead Ag products provide superior control and advanced performance for increased yields in every type of soil.

# CLOSE IN ON BIGGER YIELDS



### **Closing Wheel**

Establishes quality seed to soil contact to ensure even emergence of crop.

### **Closing Wheel Arm Repair Kit**

Ensures closing wheel operates at peak performance by keeping them centered.

### **Gauge Wheel Arm Repair Kit**

Supports the offset load allowing the arm to pivot freely allowing more control.

### **Seed Tube Guard**

Maintains a uniform furrow and consistent seed depth with longer wear life.





# SOUTH DAKOTA SOYBEAN YIELD CONTEST WINNERS

By Tom Steever



There is a common thread among top winners in the 2020 South Dakota Soybean Yield Contest. First Place finishers have a desire to improve their per/acre soybean output. Entering the contest annually is their opportunity to try a production tactic that might or might not work. It might or might not be cost effective on an entire farm. Regardless, it is a grower's chance at discovery, a chance at growing a few more bushels an acre, and a chance at being more profitable.



Bob Creasey (left) and Tyson Dyk



Bob Creasey combining

## BOB CREASEY

“The little things all added up to be a big thing,” is how Bob Creasey describes capturing the top spot in the 2020 contest. The Geddes, South Dakota, farmer is near the Missouri River where he can draw water for irrigation. There was, however, room for improvement, according to Creasey.

“We’ve always been able to raise good beans,” he said, “but not as good as we thought we should in comparison to our corn yields.”

Creasey sought agronomic advice from Alpena, South Dakota-based Next Level Ag, as well as from Pioneer agronomists, for whom Creasey is a sales representative. With that knowledge, and with help from his nephew and farming partner Tyson Dyk, something clicked. “This year it worked out,” said Creasey. “It was one of those things where everything all came together.”

Creasey compensated for late summer drought by extending his irrigation season. “Normally we’re done around September first,” he said. “This year we pushed our irrigation another couple of weeks, and I think that had a lot to do with it as well.” The crop got some assist from 28 percent nitrogen applied through Creasey’s center pivot.

The resulting yield, the highest of the 2020 contest, was 118.14 bushels an acre, entered in the Group 2 or 3 Irrigated category. Creasey drilled the Pioneer Lumisena-treated soybeans with 10-inch row spacing following a couple of passes of turbo tillage.

As most conscientious growers, Creasey keeps a close eye on his soybean crop from planting to harvest. He doesn’t have as much weed pressure as farmers to the east of him, but there are some notable maladies he scouts for.

“Fire weed or foxtail or anything like that is one of our biggest concerns,” he said, adding that he also keeps his eyes peeled for insect pests. “We’re always looking for the bean leaf beetle, and of course a little later on we deal with the aphids.” A combination of Authority Elite and metribuzin is applied to fight weeds prior to emergence. Generic glyphosate is applied post-emergence. Insecticide is applied along with the second herbicide application.

It’s Creasey’s aim to improve, which is one of his reasons for entering the soybean yield contest. “It challenges you,” Creasey concludes. “It kind of makes you decide to see if you can do better than you did before.”

## JAKE WURTZ

A similar motivation is the reason Jake Wurtz enters the yield contest. “I push that plot a little more than I do my normal field to see how it will turn out,” said Wurtz, the farm manager at the Greenwood Hutterite Colony in Douglas County, “and then I apply it to a bigger part of the farm.”

Wurtz had the top yield in the Group 2 No-Till category of the contest. His yield of 96.88 bushels an acre, the third highest in the contest, he credits to fertility, but it was not commercial fertilizer.

“We raise a lot of livestock, we use a lot of turkey manure,” said Wurtz. “That particular spot had about five ton an acre of turkey litter on it, and that’s all the fertilizer there was on it.”

He doesn’t recall the name, but Wurtz used an experimental biological only on his contest soybeans and was pleased with its performance. “I think the microbes got going in there and a lot of nutrients became available,” said Wurtz, describing a possible reaction of the biological mingled with turkey manure. “From what I’ve seen,” he said, “I think I’ll apply [the biological] on more acres this year.”

## LANCE OLESEN

For Lance Olesen, a single pre-plant tillage pass is all the soil disturbance he allows to knock down early season weeds and to avoid using a burndown herbicide. The Turkey Ridge farmer, about 45 minutes west of Sioux Falls, grew 84.74 bushel-an-acre soybeans in the Group 3 Non-Irrigated category.

“We actually use a high-speed disc and only run about 1 to 2 inches in the ground,” said Olesen.

Olesen uses a 15-inch-row planter to get beans in the ground. “We switched to that last year,” he said, explaining that his goal is to plant corn with his 30-inch-row planter while putting in narrow-row soybeans, effectively getting soybeans planted earlier. “That seems to be a big yield driver is to have them in earlier,” he said. There are added benefits from an early canopy. “We’re able to capture more sunlight and [have] way better weed control and it helps conserve moisture too.”

Olesen’s soybeans are planted with Pioneer’s LumiGEN seed treatment, followed by pre-emergence applications of Authority Assist and Sonic, then post-emergence applications of Roundup PowerMAX and Flexstar.



Lance Olesen SD Farmer Turkey Ridge



Chandler Standy (left) and dad Kory

## CHANDLER STANDY

Strong soybean yields are a family trait for Chandler Standy at Platte, South Dakota. His dad was a yield winner a few years ago. The younger Standy topped the 2020 Group 0 or 1 Irrigated category with just a shade over 84 bushels an acre.

“We have underground drip irrigation here, so we can’t do any deep tillage,” said Standy, adding that one or two passes with a Turbo-Till prepares the seedbed. They plant in 30-inch rows.

There are few weed issues other than occasional velvet leaf, controlled by Roundup prior to emergence, but Standy’s aim is to use no more herbicide than necessary.

“We had a little bit of palmer amaranth starting to come up,” Standy said. “I go out and walk the fields for that and if I see something...I go out there and chop them down.”

Standy maintains regular scouting once the soybeans are up. “I take tissue samples once every week and send them in and see if they’re lacking any nutrients,” Standy said. “We’ve got that underground drip system. If we’ve got anything lacking, we can inject it right in through the system; it goes right to the roots and that seems to really help.”





Travis Swisher and wife, Taylor, and their children, Cole (age 1), and Molly (3)

## TRAVIS SWISHER

A precision retrofit added a little speed, and a lot of accuracy to Travis Swisher's soybean planting. Swisher's point was to get seeds at the right depth and the right distance apart.

"We planted somewhere between 4 ½ and 5 [MPH]," said Swisher, less impressed with his speed than with his seed placement. "We had great spacing, great singulation and great emergence."

Swisher, who topped the Group 1 No-Till category with a yield of 81.05 bushels an acre, applies Authority Assist herbicide pre-

emergence, followed by Roundup and then Dimetric post-emergence. For 2021, Swisher, who farms north of Groton, South Dakota, is considering spraying Endura fungicide to ward off white mold.

Primary among Swisher's reasons for entering the soybean yield contest is his moral obligation to the land.

"The wagon stopped one hundred-thirty-some-odd years ago right here," said Swisher. "God put us here for a reason and I think that reason was to show what we can do on the soil that we get to work with."



Dean Bosse

## DEAN BOSSE

Dean Bosse's soil, between the Sioux and Missouri Rivers, is too wet to farm maybe two out of ten years, but it produces well for the Union County, South Dakota farmer. He won the Group 3 No-till category with 80.06 bushels an acre, according to Bosse, without babying that plot. "We didn't do anything special," said Bosse, adding that adequate subsoil moisture "carried us through" the dry late summer.

Bosse is proud of the money he saves with zero soybean tillage. "We don't have to go out and spend that \$15 – \$20 an acre," he said.

"With these no-till planters we can go right in there and plant in the cornstalks."

To manage weeds on his 30-inch rows Bosse varies his herbicide chemistries, but is especially grateful for one in particular. "Liberty has been a lifesaver for us here, I'll tell you that," said Bosse, who uses Liberty post-emergence along with Enlist. His pre-plant herbicides are Authority First and Roundup.

At age 77, Bosse continues to enter the contest because his dad did. "It's just kind of a challenge," he said, "to see what we can raise."



Paul Voigt (left) and Dad

## PAUL VOIGT

Paul Voigt's story includes good soybean production and interesting family farm lineage. Voigt, from Avon, South Dakota, the lone entrant in the Group Zero No-Till category, had a yield of 65.7 bushels an acre.

"We have quite a bit of highly erodible land," said Voigt, explaining his reasons for not tilling. "It's kind of worked out pretty good for us to do it that way."

Voigt drilled his contest soybeans in 13-inch rows, but plants some of his crop in 30-inch rows, depending on whether the planter is being used for corn. He uses Acceleron seed treatment for his earlier planted soybeans, but later ones are planted without. He hires insecticide treatment if he determines through scouting that aphids, bean leaf beetles or spider mites have crossed economic thresholds.

During Voigt's upbringing, his father farmed land belonging to a sister and two brothers, each visually impaired. Paul Voigt came back to farm that land after getting a college degree, encouraged by his eighth grade-educated father. "Once I got out of college," said Voigt, "I decided the farm looked pretty good."

One yield winner pointed out that there is often less than a bushel an acre that separates the top spot in a category from those who did not place. Voigt concluded that there are growers who "have some really good ground and really good practices and they're really good farmers," he said. "I've just probably been a little lucky."





ASGROW.COM

## WHEN PUSHING YIELDS, IT PAYS TO BE FLEXIBLE.

Drive profitability and manage tough-to-control weeds with the combined performance of Asgrow® brand soybeans and XtendFlex® Technology – the industry’s first triple-stacked soybean trait containing tolerance to dicamba, glyphosate and glufosinate. Ask your dealer how much further you can grow when Asgrow leads the way.



Bayer is a member of Excellence Through Stewardship® (ETS). Bayer products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Bayer’s Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. Commercialized products have been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from this product can only be exported to, or used, processed or sold, in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move materials containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

XtendiMax® herbicide with VaporGrip® Technology is part of the Roundup Ready® Xtend Crop System, is a restricted use pesticide and must be used with VaporGrip® Xtra Agent (or an equivalent vapor-reducing agent). For approved tank-mix products (including VRAs and DRAs), nozzles and other important label information, visit XtendiMaxApplicationRequirements.com.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. XtendiMax® herbicide with VaporGrip® Technology is a restricted use pesticide. Not all products are registered in all states and may be subject to use restrictions. The distribution, sale or use of an unregistered pesticide is a violation of federal and/or state law and is strictly prohibited. Check with your local dealer or representative for the product registration status in your state. For additional product information, call toll-free 1-866-99-BAYER (1-866-992-2937) or visit our website at www.BayerCropScience.us. Bayer Crop Science LP, 800 North Lindbergh Boulevard, St. Louis, MO 63167.

Products with XtendFlex® Technology contain genes that confer tolerance to glyphosate, glufosinate and dicamba. Glyphosate will kill crops that are not tolerant to glyphosate. Glufosinate will kill crops that are not tolerant to glufosinate. Dicamba will kill crops that are not tolerant to dicamba. Contact your seed brand dealer or refer to the Bayer Technology Use Guide for recommended weed control programs.

Asgrow and the A Design®, Asgrow®, Bayer, Bayer Cross, Roundup Ready® and XtendFlex® are registered trademarks of Bayer Group. LibertyLink® and the Water Droplet Design® is a trademark of BASF Corporation. ©2021 Bayer Group. All Rights Reserved.







WE ARE U.S. SOYBEAN FARMERS



## SUSTAINABILITY NEVER GOES OUT OF SEASON

---

### COVER CROPS

---

**Customers prefer U.S. soy because it's sustainable.** But demands for sustainability continue to rise.

Adopting a common practice such as planting a cover crop to slow runoff and increase soil organic matter is another step forward in improving your sustainable footprint. See why sustainability never goes out of season at [unitedsoybean.org](http://unitedsoybean.org).



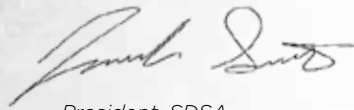
SOUTH DAKOTA SOYBEAN ASSOCIATION

# AGOUTLOOK

## SPECIAL FEATURE

On behalf of the Board of Directors of the South Dakota Soybean Association, I would like to extend a sincere thank you to all sponsors, speakers and participants for making AgOutlook 2020 a huge success. Special thanks to everyone that contributed their time and talents in developing a great magazine and virtual program.

Jordan Scott



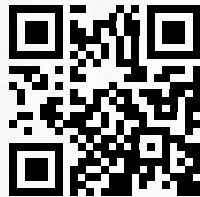
President, SDSA



**JORDAN SCOTT**  
District at Large, SDSA President



**SCAN THIS QR CODE TO VIEW THE FULL SD SOYBEAN AGOUTLOOK MAGAZINE.**



**WE HAVE A HUNCH THAT MOST FARMERS LIKE A NICE OPEN-FACED SANDWICH**

**EVEN MORE THAN THEY LIKE BANKING ADS.**



FIRSTDAKOTAAG.COM

So imagine eating this nice open-faced sandwich while you consider that we've been helping farmers and ranchers thrive in this unpredictable industry every season since we opened our doors in 1872. How's that for something to chew on?





[ASGROW.COM](http://ASGROW.COM)

## FOR BETTER MARGINS, THE LINE FORMS HERE.

Stay out in front with Asgrow® brand soybeans. Featuring 100% exclusive genetics and leading agronomic expertise to help maximize profitability on every acre. Ask your dealer how much further you can grow when Asgrow leads the way.

Asgrow and the A Design®, Asgrow®, Bayer® and Bayer Cross are registered trademarks of Bayer Group. ©2020 Bayer Group. All Rights Reserved.



# WELCOME TO THE TEAM!



The First National Bank in Sioux Falls is excited to share that we will be expanding our commitment to South Dakota's ag industry with the addition of our newest ag banker to serve the Chamberlain area.

## TODD VAN DEN BOSCH

Ag Banker, Chamberlain | (605) 682-8232



**First National Bank**

www.fnbsf.com The First National Bank in Sioux Falls® Member FDIC

**11<sup>th</sup> Largest AG BANK IN THE USA**  
AMERICAN BANKERS ASSOC. • 1914 • 1999

Reliable.  
Accountable.  
Familiar.

**GO WITH RELATIONSHIPS.**

**AG BANKING**

**DACOTAH BANK**

BANKING • INSURANCE • MORTGAGE • TRUST

dacotahbank.com

MEMBER FDIC Insurance and Trust not FDIC insured.

**BUILT FOR LIFE**  
TIMPTE

**NEW & USED TRAILER SALES PARTS & SERVICE**

BEST WARRANTY • BEST PAYLOAD • FACTORY DIRECT PRICING  
BEST PARTS & SERVICE AVAILABILITY IN SOUTH DAKOTA  
FINANCING AVAILABLE THROUGH OUR FREEDOM FINANCE PROGRAM

Service available on **ALL** makes and models.

**Stop in or call us today!**

**Timpte Sioux Falls**  
25768 Cottonwood Ave | Sioux Falls, SD 57107  
800-424-8099

**TIMPTE**  
Since 1884

**RINKE NOONAN**  
*attorneys at law*

320.251.6700 RinkeNoonan.com

**FIRMLY COMMITTED.**

**Agriculture's Choice**

- FARM SUCCESSION PLANNING
- WETLANDS
- COMPLIANCE
- ESTATE PLANNING
- PUBLIC DRAINAGE
- PERMITS



EXPERIENCE THE

# PERFORMANCE RESULTS

YOU EXPECT,  
WITH THE

YOU DESERVE.

As a fiercely independent seed company, our number one priority is **YOUR SUCCESS.**

Legend Seeds is proud to offer industry-leading traited, conventional, and high protein soybeans.

Learn More @ [www.legendseeds.net](http://www.legendseeds.net)



800.678.3346 • [legendseeds.net](http://legendseeds.net)



**IN THESE CHANGING TIMES LET'S REMEMBER SOME THINGS ARE NOW MORE IMPORTANT THAN EVER – GOOD PARTNERS.**

## **SOUTH DAKOTA FARM BUREAU IS PROUD TO BE A SPONSOR PARTNER OF SOUTH DAKOTA SOYBEAN!**

**SDFB is a recipient of new grant dollars for Wetland Mitigation Banking!**

*Learn more by visiting [sdfbf.org](http://sdfbf.org) and click on "Wetland Mitigation Banking".*



**SOUTH DAKOTA FARM BUREAU®**

*Your Trusted Leader in Agriculture.*

**[sdfbf.org](http://sdfbf.org) • 605-353-8050**



Stop wasting time on spreadsheets and data sets. Let Premier Crop manage the complexity of your fields' agronomics to squeeze every bit of profit and efficiency out of your fields.



[info.premiercrop.com/yieldefficiency](http://info.premiercrop.com/yieldefficiency) | 605.413.2954



AGRICULTURE  
WORKS  
HERE.

NAME:  
Laron & Jolene

LOCATION:  
Clear Lake, SD

OPERATION:  
Corn, Soybean & Swine  
Producers

View their story at:  
[fcsamerica.com/laronjolene](http://fcsamerica.com/laronjolene)

**IF AGRICULTURE  
MEANS SOMETHING  
TO YOU, YOU MEAN  
EVERYTHING TO US.**

**RURAL AMERICA IS WHERE  
WE WORK. FARMERS AND  
RANCHERS ARE WHO WE SERVE.**

Farm Credit Services of America is dedicated to the business of agriculture. It isn't just something we do, it's everything we do – an entire organization that spends every working day thinking, planning and investing in ways to serve you better. Discover the benefits of a lender committed to your success.  
**Call 800-884-FARM.**



**Farm Credit Services  
of America**

**AGRICULTURE WORKS HERE.®**



# WHERE'S MY DOLLAR?

The Beef Checkoff acts as a catalyst for change and is designed to stimulate beef sales and consumption through a combination of initiatives including consumer advertising, education, research, public relations and new-product development. Issues management provided by the Beef Checkoff continues to be a shield of protection for the industry. Possible issues caused by misinformation are handled at the front line before they have the ability to escalate.



## South Dakota Beef Industry Council

### RESEARCH

Around the world, beef consumers demand high-quality, safe and nutritious products. As protein choices continue to expand, beef safety and nutrition research are key to ensuring that both domestic and foreign beef consumers have confidence in their purchasing decisions.

### PROMOTION

Beef Checkoff promotion campaigns showcase the powerhouse nutrients beef provides, remind consumers of the unbeatable pleasure that beef brings to meals and bring attention to the men and women who raise beef for the world.

### EDUCATION

Educational programs, funded by the Beef Checkoff, help enhance beef's image by sharing nutritional data and other positive messages directly to consumers of all ages.



### FOREIGN MARKETING

With 95 percent of the global population and 80 percent of the global buying power located outside of U.S. borders, foreign marketing is essential. South Dakota Beef Industry Council partners with USMEF, contractor to the Beef Checkoff, to increase the value and profitability of US Beef in international markets, specifically Japan and the European Union.



Leveraging dollars to engage with consumers in highly populated areas continues to be a focus. State to state partnerships offer opportunity to expand the SD Checkoff footprint to consumers in the Northeast region of the United States.

Why is this important? When looking at cattle to consumer ratio comparisons, cattle outnumber consumers by over 4 to 1 in South Dakota. This reverses in New York as consumers outnumber cattle by nearly 20 to 1.

**WORKING 365**  
**DAYS A YEAR INVESTING IN**  
**THE FUTURE OF BEEF**

To learn more about the South Dakota Beef Industry Council and the Beef Checkoff visit [www.sdb beef.org](http://www.sdb beef.org)

Follow us on Facebook, Instagram and Twitter



Checkoff funds, by law, cannot be used to influence government policy or action, including lobbying.







## Investing in Your Growth

As a locally-grown organization, we're proud to help our friends and neighbors achieve financial success. It's the PREMIER Way!



PERSONAL | BUSINESS | CREDIT | MORTGAGE  
[firstpremier.com](http://firstpremier.com)

# LET US TAKE CARE OF YOUR SEED.

Renk Seed is proud to offer the following soybean products. Give us a call to discuss which variety will work best on your farm.

- Enlist E3®
- Xtendflex®
- LibertyLink® GT27®
- Roundup Ready 2 Xtend®
- Roundup Ready 2 Yield®



William Jennings  
402-961-0963

Andrew Zemlicka  
605-881-0659



★ AMERICAN OWNED AND OPERATED ★



AGP soybean processing plant in Aberdeen, South Dakota.



## SERVING COOPERATIVES AND AGRICULTURAL PRODUCERS

Learn about all AGP locations at [AGP.com](http://AGP.com).

© 2021 Ag Processing Inc a cooperative. All rights reserved.





SCAN THIS  
QR CODE TO SEE  
VIDEO OF THE  
AGOUTLOOK  
AWARD WINNERS.



Open your camera, hover over code and tap the link.

**Nutrien**  
Ag Solutions

011010110110

# EVERY STEP. EVERY SEASON.

Make the most of every opportunity to lead the field with Nutrien Ag Solutions. Offering a comprehensive portfolio of innovative products and services plus local expertise. Talk to your crop consultant about financing options or visit [NutrienAgSolutions.com](http://NutrienAgSolutions.com)

**#LeadingTheField**

- SEED
- NUTRITION
- PROTECTION
- DIGITAL
- FINANCIAL

©2020 Nutrien Ag Solutions, Inc. All Rights Reserved. 8737\_LL720



## FARM & RURAL STRESS HOTLINE

Even those with toughened hands and hearts need someone to talk to. Extreme weather conditions, machinery breakdowns, a volatile ag environment, long hours that prevent time with family, and lowered income all cause frustration.

Avera is a 60-year regional leader in behavioral health services. We offer the Farm & Rural Stress Hotline for symptoms of sadness, anxiety, hopelessness, overwhelming feelings, and more. It's free, confidential and available 24/7.

Call today at 1-800-691-4336.



Thanks to the soybean producers who completed your U.S. Department of Agriculture surveys. Your responses are critical to industry leaders working to ensure that sound policies are in place to enhance the future of soybean farming.



United States Department of Agriculture  
National Agricultural Statistics Service

## ESSENTIAL AMINO ACIDS

CHANGING THE CONVERSATION ON SOY QUALITY.

The Minnesota Soybean Research & Promotion Council invests checkoff dollars with neighboring states to study feed quality. Find out more at [soyquality.com](http://soyquality.com).

# Billion

Farm • Fleet • Commercial

BUSINESS LINK ON THE JOB

You have the ability to save **BIG** on new Ram trucks and commercial vehicles when you purchase through Billion Fleet, Farm & Commercial.

There are special discounts and concessions that you can only qualify for through a Billion Automotive fleet specialist.\*

Save more than you thought possible! Contact us today.  
**888-531-1013**

**BillionAuto.com/Fleet**  
Locations in South Dakota, Iowa and Montana.

\*Must meet certain eligibility requirements to qualify for the fleet program and all applicable program discounts. Concessions vary by make and model. Vehicle shown may not be actual vehicle advertised. See fleet dealer for complete details and all restrictions.



*Rooted in Agriculture*

**Tri-State NEIGHBOR**

800-888-1380 | [tristateneighbor.com](http://tristateneighbor.com)

*Sewing Midwest Farmers for the Last 37 Years*

## Fueling Biodiesel Growth in South Dakota

**MEG Corp and South Dakota Soybean are working together to expand availability and use of biodiesel.**

Increasing the use of biodiesel increases the demand for soybean oil, adding value to each bushel of soybeans!

Through this partnership, MEG Corp provides:

- Education and technical support to fuel suppliers and retailers to help increase availability throughout the state.
- Training for diesel mechanic students and professionals to deliver accurate information about biodiesel's performance in vehicles and equipment.
- Education and technical support for fleets, farmers and other end users to build confidence in fueling with biodiesel blends.



Questions about diesel or biodiesel?  
Contact our Diesel Helpline at  
(800) 929-3437 or [info@megcorpnmn.com](mailto:info@megcorpnmn.com)

**BIODIESEL**  
Better. Cleaner. Now!

- Creating a cleaner energy future
- Supporting thousands of green American jobs
- Carbon reduction solution that is here, now

Learn More at [BetterCleanerNow.com](http://BetterCleanerNow.com)

Sponsored by the National Biodiesel Board, the United Soybean Board, State Soybean Checkoff Boards, and the U.S. Canola Association.



126 West Second Street South  
Brookings, SD 57006  
877-212-2564  
[www.hurleyandassociates.com](http://www.hurleyandassociates.com)  
Serving agricultural producers since 1988

**HA** HURLEY & ASSOCIATES  
Agri-Marketing Centers



**SHOP FOR  
QUALITY  
BRANDS IN:**

- Home • Farm • Tools & Hardware
- Automotive • Pet & Animal Health
- Power Equipment • Lawn & Garden
- Plumbing • Electrical



**SHOP OUR 56 STORES OR  
ONLINE ANYTIME AT [WWW.RUNNINGS.COM](http://WWW.RUNNINGS.COM)**

**COMMITTED TO YOU  
AND YOUR AG OPERATION**



*As the state's number-one industry, agriculture represents South Dakota's past, present and future. Today's ag operators are among the most hardworking, committed and business-savvy people around, and we remain committed to investing in your success for the long haul.*



**CLEANER FIELDS. HIGHER YIELDS.**

**NOTHING LESS.**



™ & ® Trademarks and service marks of Corteva Agriscience and its affiliated companies. © 2021 Hoegemeyer. The transgenic soybean event in Enlist E3R soybeans is jointly developed and owned by Dow AgroSciences LLC and M.S. Technologies L.L.C.



**100% USA SOYBEANS**

**DUST**  
A product of:  
**Low Mu Tech**

**CLEANER SAFER SOY.**

**WHY USE *DUST* INSTEAD OF TALC OR GRAPHITE?**

**This new innovative patented seed lubricant:**

- Replaces talc and graphite for seed lubrication and meter performance
- Cleaner option than what you currently use
- Easy to use
- 100% Soybean Product - Use what you Grow!

**Contact John Horter for pricing and to order @ 605-216-4852**

**YOUR CHOICE...WHEN QUALITY IS IMPORTANT**

**C&R SUPPLY, INC.**  
*Since 1975*

**3610 N Cliff Ave  
Sioux Falls, SD**

**crsupply.com  
800-322-2637**

Out of its home office in Stone Mountain, GA., USA Poultry & Egg Export Council's (USAPEEC) reach is far-ranging. Through its network of international offices and consultants in key markets around the globe, USAPEEC keeps current on issues that directly impact U.S. poultry and egg exports.

Although USAPEEC's mission is to promote exports of U.S. poultry and eggs worldwide, the Council has evolved into an association that is an advocate for the industry on trade policy issues. Because of its status as a not-for-profit entity, USAPEEC does not lobby, but the organization can and does act as an intermediary with USDA, in Washington and at embassies and Agricultural Trade Offices around the world.

Soybean growers and the poultry industry have had a long and mutually beneficial relationship. Nationwide, 98 percent of all soybean meal is consumed by pigs, cattle, and poultry. The U.S. poultry and egg industry is the largest user of U.S. soybean meal by livestock group, accounting for 55 percent of all the soybean meal produced in the U.S. With that being said, soybean farmers' profit potential stands to grow as the demand for U.S. meat and poultry exports increases.

More exports of U.S. poultry and eggs mean more value-added exports of U.S. soybean meal. In 2019, U.S. poultry and egg exports accounted for 145 million soybean bushel-equivalents. As poultry and egg exports increase, there is a greater need for more poultry and egg production, resulting in more soybean meal needed for feed.

USAPEEC has forged strong partnerships with national and state soybean and corn organizations since 1996. To date, 22 soybean and corn boards hold seats on the USAPEEC Board of Directors. Through checkoff funding, USAPEEC's commodity members fund over 60 projects in 35 different countries and make up more than 30% of USAPEEC's overall budget. Beyond annual membership dues, the commodity board members set a record high in project funding in 2019. These funds allow USAPEEC to coordinate with its international directors to work on trade policy, promote U.S. poultry and eggs, and build new and improve existing relationships with importers.







**PLUS**

REWARDS

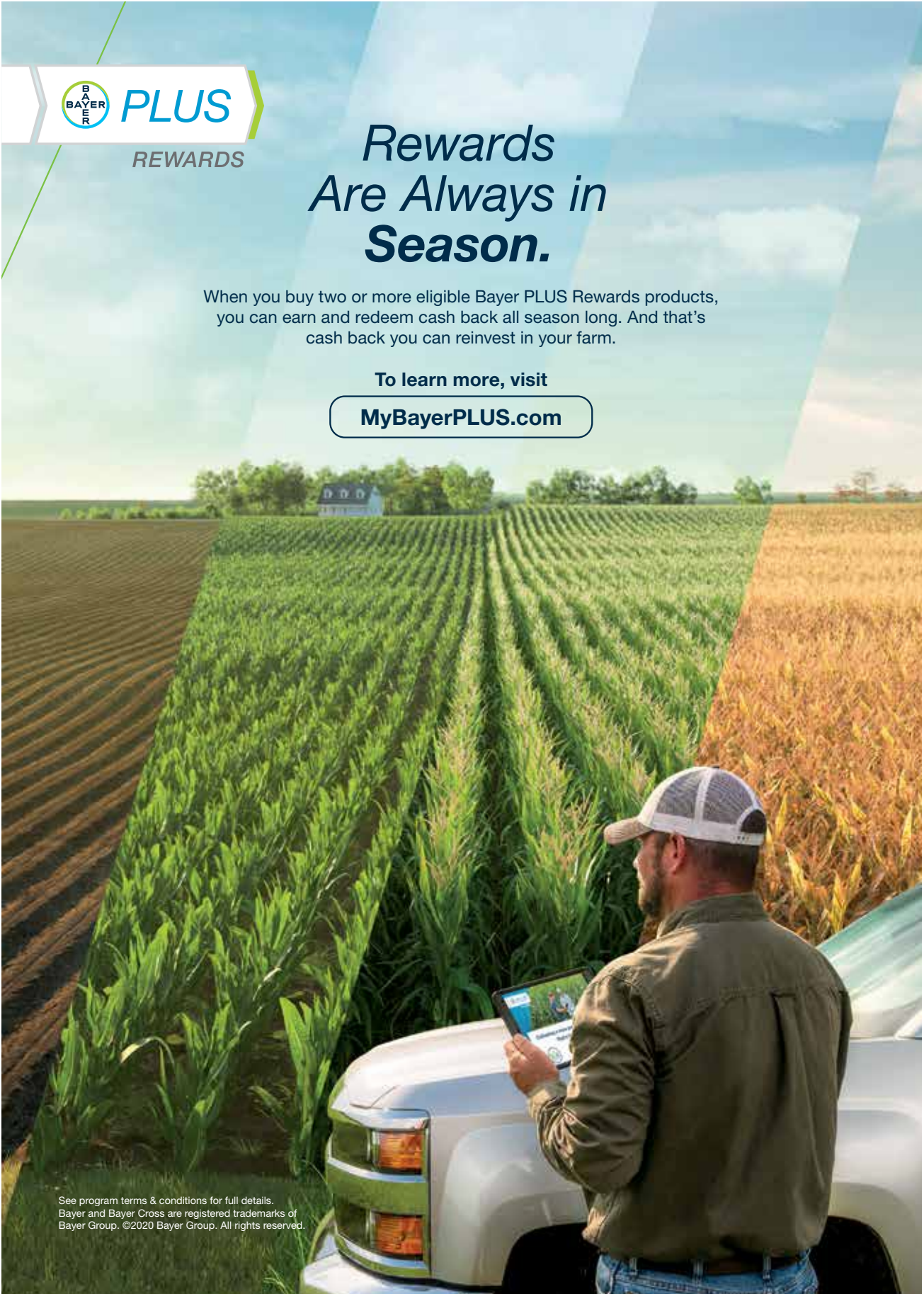
# Rewards Are Always in Season.

When you buy two or more eligible Bayer PLUS Rewards products, you can earn and redeem cash back all season long. And that's cash back you can reinvest in your farm.

To learn more, visit

[MyBayerPLUS.com](https://www.MyBayerPLUS.com)

See program terms & conditions for full details.  
Bayer and Bayer Cross are registered trademarks of  
Bayer Group. ©2020 Bayer Group. All rights reserved.





DIAMOND LEVEL SPONSORS



PLATINUM LEVEL SPONSORS



GOLD LEVEL SPONSORS



SILVER LEVEL SPONSORS



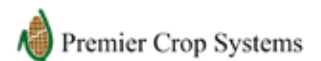
BRONZE LEVEL SPONSORS



MEDALLION LEVEL SPONSORS



CHAMPION LEVEL SPONSORS



GENERAL EXHIBITORS



**SOUTH DAKOTA SOYBEAN PROCESSORS**

**FARMER OWNED**

South Dakota crushing facility  
– Adding value to

**LOCALLY SOURCED**

*Soybeans Since 1996!!*

**Premiums Paid for Non-GMO Soybeans**

Accepting Non-GMO deliveries to our Miller/St. Lawrence, SD plant or Arlington, SD

Accepting GMO deliveries to our Volga, SD plant

**Complete our Non-GMO Certified Grower Network Surveys for additional premiums!**

For more information, Call Kari or Logan at  
**1-888-737-7888** or visit [sdsbp.com](http://sdsbp.com)

SD-667316-1



## PLAN YOUR *legacy*

**What impact will you leave on your family?  
Your farm? The next generation?**

Much like farming, estate planning takes time and dedication. Taking time to plan now can ease family burdens and protect the land and assets you've dedicated your life to. It can turn your legacy from well-meaning intentions into a powerful reality for those around you.

The Thompson Law team builds estate and succession plans with clarity, certainty, and simplicity to *keep families together*.

- » Agricultural Estate Planning
- » Asset Protection Planning
- » Estate and Trust Administration
- » Medicaid Planning
- » Business Planning
- » Tax Efficient Structures for Bringing on the Next Generation
- » Transparent Fees

We offer a **FREE** one-hour initial consultation for any new estate planning client.



5027 S. Western Ave. | Sioux Falls, SD  
**(605) 362-9100** [cathompsonlaw.com](http://cathompsonlaw.com)



MEDIA SPONSORS



**THEN.  
AND NOW.  
WE'RE HERE FOR YOU.**



**A long history of commitment to America's producers. This is BNSF.**

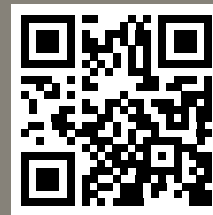
At BNSF, we've supported America's producers for over 170 years. Together, we have been a part of the innovation that's made the U.S. farming supply chain one of the most efficient and productive in the world. We have always been a critical link to delivering agricultural products whenever and wherever they're needed. Our employees are driven to work hard to keep your business moving safely every day, no matter the challenges. We were there for you then; we are here for you now. You can count on us.

We're here for you at [bnsf.com/ag](https://www.bnsf.com/ag)





SCAN THIS  
QR CODE FOR  
MORE INFO ON  
AGOUTLOOK.



*Open your camera, hover over code and tap the link.*

# ENLIST POWER OF PION<sup>3</sup>ER.

What makes Pioneer® brand Enlist E3® soybeans different? Our knowledge of them. We've conducted hundreds of on-farm trials of Enlist E3 soybeans. Contact your local Pioneer sales representative to learn which variety works best for your operation.

[Pioneer.com/DefeatWeeds](https://Pioneer.com/DefeatWeeds)



The transgenic soybean event in Enlist E3® soybeans is jointly developed and owned by Dow AgroSciences LLC and M.S. Technologies L.L.C. Pioneer® brand products are provided subject to the terms and conditions of purchase which are part of the labeling and purchase documents. <sup>TM</sup>® Trademarks of Corteva Agriscience and its affiliated companies. © 2021 Corteva. 21D-1008



**UNLEASH YOUR BEANS' FULL POTENTIAL  
WITH ENLIST E3<sup>®</sup> SOYBEANS  
FROM DAIRYLAND SEED.**



**DAIRYLAND SEED**

**(800) 236-0163**

**DairylandSeed.com**

™® Trademarks of Corteva Agriscience and its affiliated companies. The Enlist weed control system is owned by Dow AgroSciences LLC. The transgenic soybean event in Enlist E3<sup>®</sup> soybeans is jointly developed and owned by Dow AgroSciences LLC and M.S. Technologies L.L.C. Enlist Duo and Enlist One herbicides are not registered for sale or use in all states or counties. Contact your state pesticide regulatory agency to determine if a product is registered for sale or use in your area. Enlist Duo and Enlist One herbicides are the only 2,4-D products authorized for use with Enlist crops. Consult Enlist herbicide labels for weed species controlled. Always read and follow label directions. © 2020 Corteva.

# PRECISION SOIL MANAGEMENT

**Maximize Your Soils Potential!**

- **Soil Management Zoning**
  - The most accurate and consistent soil zones in the industry
  - Variable rate seed & fertilizer prescriptions
- **Tile Drainage Assistance**
  - Elevation mapping
  - Complete tile layout planning & cost estimates
  - Permitting assistance
- **Agronomy Services**

**Give Us A Call Today 605-302-0085**

**Francis Schaffer**

**Jim Millar**

**605-380-1073**

**605- 460-1033**

[www.precisionsoil.com](http://www.precisionsoil.com)

**WE HAVE  
YOUR BACK**  
EVEN WHEN  
MOTHER NATURE  
DOESN'T.



TATE THORSTENSON  
Agri-Business Banker  
605.978.1134  
tate.thorstenson@bankeasy.com

*Ag Banking*



Member  
FDIC

605.978.1134 | [WWW.BANKEASY.COM](http://WWW.BANKEASY.COM)



**Every chick  
deserves to  
feel like a  
superhero**

**Did you know?**

Soybeans purchased from the Midwest United States via the Pacific Northwest ports contain the right combination of nutrients to keep your chickens happy, content and producing.



Learn more at [soyquality.com](http://soyquality.com)

**INSECURITY  
STABILITY**

**EideBailly**  
CPAs & BUSINESS ADVISORS

From strengthening your position with your lenders to ensuring everything is in place for the next generation to take over, we have the resources and knowledge to keep you headed in the right direction.

605.977.2728 | [eidebailly.com/ag](http://eidebailly.com/ag)

**USDA** United States Department of Agriculture  
Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS) helps American farmers, ranchers, and forest landowners make conservation work for them. Through the system of more than 300 practices we promote, conservation planning helps people to improve production, reduce input costs, and conserve natural resources for the future. We also provide financial resources through the Farm Bill to help with the cost of getting conservation on the ground.

**Giving Advice & Solutions** | **Providing Support Backed by Science & Research** | **Keeping Working Lands Working**

We provide free, one-on-one, personalized advice on the best solutions to meet the unique conservation and business goals of those who grow our nation's food and fiber.

Farmers are the backbone of America. We help people to make investments in their operations and local communities, boost rural economies, increase competitiveness of American agriculture, and improve the health of our air, water, and soil.

Contact NRCS South Dakota: <http://bit.ly/ContactNRCS>  
USDA is an equal opportunity provider, employer and lender.

*together, we're*  
**ALWAYS GROWING**

Food affects all of us - from farmers and delivery drivers, to grocery store workers and customers.

Join South Dakota's ag industry to ensure that the future of food remains strong.

Donate today by visiting  
**AlwaysGrowingSD.com**

 Ad is funded by the South Dakota Ag Foundation

**RE-ENERGIZING  
CO-OP MEMBERSHIP**

**YOUR VOICE. YOUR POWER.  
YOUR CO-OP.**

The best part about being a member of your local Touchstone Energy® Cooperative is just that ... it's YOUR cooperative.

Learn more about the power of membership at  
**YourCoopPower.com**

  
Touchstone Energy®  
Cooperatives





# AUTOCART®

## Driverless Ag Technology

**RAVEN**

AUTONOMY

Follow the autonomous ag path at [AutonomyByRaven.com](http://AutonomyByRaven.com)

WE'RE A ONE OPTION  
IS NO OPTION  
KIND OF SEED COMPANY.



THE GENETICS YOU NEED PROTECTED BY THE TRAITS YOU WANT.



[WWW.PETERSONFARMSSEED.COM](http://WWW.PETERSONFARMSSEED.COM)

# PIVOT BIO

## Nitrogen's Turning Point

Built on a shared purpose to achieve higher productivity and improve the health of our land,

Pivot Bio is dedicated to delivering a better, more predictable nitrogen solution to farmers.

To learn more about nitrogen's turning point, visit [pivotbio.com](http://pivotbio.com)



0707.12.20 ©2020 PIVOT BIO



South Dakota Dairy Producers

[www.sddairyproducers.org](http://www.sddairyproducers.org)

(605)251-2439

## The SD No Till Association

Promoting no till, soil conservation and diverse cropping systems in SD since 1985!

### 2021 Events

Presentations and speakers include:

- **Building Soil Health while Stacking Enterprises and Improving Profitability for The Next Generation.** Jerry Doan, Black Leg Ranch, McKenzie, ND.
- **Building Soil Health into a Corn-Soybean and Corn-Soybean-Wheat Crop Rotation.** Dr. Abbey Wicks, NDSU Extension Soil Health Specialist, Fargo, ND.
- **Building Grassland Soil Health.** Stan Boltz, Regional Soil Health Specialist, USDA-NRCS-SD.
- **Native Soil Nutrient Supply and Carbon Basics.** Anthony Bly, SDSU Soils Field Specialist.
- **The Benefits of Crop Rotation.** Dr. Dwayne Beck, SDSU Dakota Lakes Research Farm.

All presentations will be available for viewing at [www.sdnottill.com](http://www.sdnottill.com)

**We want to thank our sponsors!  
They make these events possible!**

**See you in person in 2022!**

Let Pork be Your Passport

BROUGHT TO YOU BY  
100% REAL PORK  
AMERICA'S PIG FARMERS

Garlic Sriracha  
Pork Stir Fry

[pork.org/realpork](http://pork.org/realpork)

© 2020-21 National Pork Board, Des Moines, Iowa USA. This message funded by America's Pork Checkoff Program.

pork  
South Dakota  
Pork Producers  
Council

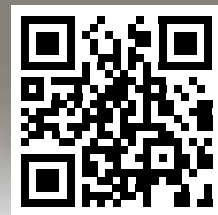
## The perfect planter is already in your shop!

PRECISION PLANTING TECHNOLOGY  
ALLOWS THE BEST OF TOMORROW TO  
BE ON YOUR PLANTER TODAY!



Call the planter experts  
at Bauman Agency  
605-353-1112

**SCAN THIS  
QR CODE TO  
LEARN MORE  
ABOUT THE  
SPEAKERS FROM  
AGOUTLOOK.**



Open your camera, hover over  
code and tap the link.







# WHY MEMBERSHIP IS CRITICAL NOW MORE THAN EVER.

Numerous organizations are working against farmers. It's important for soybean growers to come together - for our families and for our future generations.

## OUR VOICE IS YOUR VOICE

The South Dakota Soybean Association focuses on policy and legislation, while ensuring your voice is heard and your interests represented in Pierre and in Washington D.C.

## WE ADVOCATE FOR FARMERS ON:

- Development and use of biodiesel
- Clear, consistent regulations on domestic livestock
- Trade negotiations and reducing barriers to soy and meat exports
- Tax reform and Farm Bill legislation

## MEMBERSHIP OPTIONS:

**1 Year: \$150 | 3 Year: \$200 | Lifetime: \$800  
Student: \$0**

## YOUR MEMBERSHIP INCLUDES:

- 3-year or lifetime members receive a \$100 or \$200 seed voucher with purchase of 50 or 100 units of seed.
- Complimentary membership in the American Soybean Association
- Special discounts at Cabela's, Commodity Classic and more; see full list of benefits at: [soygrowers.com/belong/membership-benefits](http://soygrowers.com/belong/membership-benefits)

## Membership APPLICATION

Application and payment also available online at [sds soybean.org](http://sds soybean.org)

Name: \_\_\_\_\_

Name of Spouse: \_\_\_\_\_

Farm/Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Farmer  Extension  Finance  Elevator

Agribusiness  Educator  Other: \_\_\_\_\_

Total Farm Acres: \_\_\_\_\_

Soybean: \_\_\_\_\_ Wheat: \_\_\_\_\_

Corn: \_\_\_\_\_ Livestock: \_\_\_\_\_

## Payment INFORMATION

Application and payment also available online at [sds soybean.org](http://sds soybean.org)

1 Year \$150  3 Years \$200  Lifetime \$800  Student \$0

Check Enclosed  Credit Card: Visa  Mastercard

American Express  Discover

Name on card: \_\_\_\_\_

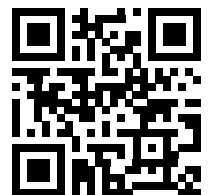
Credit Card #: \_\_\_\_\_

Expiration Date: \_\_\_\_\_ CVC Code: \_\_\_\_\_

I would like to receive the South Dakota Soybean Leader:

Electronic Copy  Physical Copy

\*SDSA dues are not tax deductible as a contribution for federal tax purposes, but may be deducted as a business expense.





## ALWAYS HERE. ALWAYS CARING.

For over 100 years, De Smet Farm Mutual has been helping to protect what we all love about South Dakota.

In good times and bad, we have remained committed to serving the families, farmers, and ranchers in this great state — providing the most progressive insurance policies and offering bundled plans that save you money and give you peace of mind.

While it may take some time to recognize our new look, you can have confidence that the values our company was founded on are stronger than ever.



FARM & RANCH



HOME



AUTO

### SIGN UP FOR A FREE HITCH PIN!

Scan the QR Code or visit the website below, submit the online form and watch your mailbox!

[www.DeSmetFarmMutual.com/soybean](http://www.DeSmetFarmMutual.com/soybean)

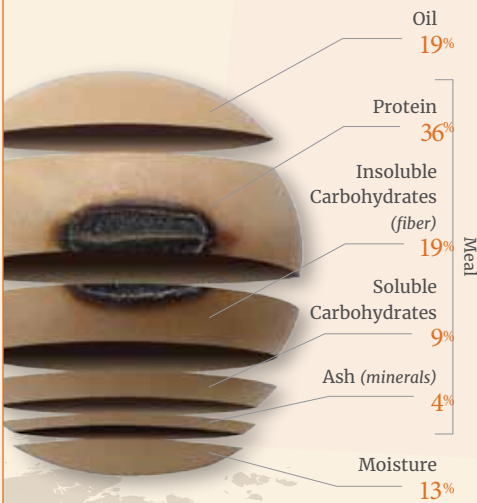


(605) 854-3337 | [www.DeSmetFarmMutual.com](http://www.DeSmetFarmMutual.com)





## SOYBEAN COMPOSITION



SOUTH DAKOTA

# SOY STATS

SDSOYBEAN.ORG | 605.330.9942



## SOYBEAN TRANSPORTATION SCALE CONVERSIONS

### CARGO CAPACITY



Large Semi:

24.5 Metric Tons = 900 Bushels



Jumbo Hopper Car:

99.79 Metric Tons = 3,666 Bushels



110-Car Shuttle Train:

10,977 Metric Tons = 403,294 Bushels



Panamax Freighter:

51,709 Metric Tons = 1,899,788 Bushels



New Panamax Freighter:

66,000 Metric Tons = 2,424,840 Bushels

## WHERE IN THE WORLD DO SOUTH DAKOTA SOYBEANS GO?



Average Distance Soybeans Travel (National Average)

1,110 miles by rail

860 miles by barge

## EQUIVALENT UNITS

4 Large Semitrucks = 1 Jumbo Hopper Car

5.2 110-Car Shuttle Trains = 1 Panamax Freighter

## SOUTH DAKOTA'S MEAL TICKET ANIMAL AG CONSUMPTION 2019

Hogs	7,679,232 Bu
Turkeys	1,286,538 Bu
Dairy Cows	1,026,564 Bu
Layers	783,255 Bu

IN TOTAL: Livestock in South Dakota used the meal from 11,742,159 bushels of South Dakota soybeans.

## SD SOYBEAN CROP (5-YEAR AVERAGE)

Harvested Acres:  
5,290,000

Bushels Harvested:  
242,616,667 Bu

Average Yield:  
45.2 Bu/A

Average Price Per Unit:  
\$8.63/Bu

## SOYBEAN PRODUCTION BUSHELS HARVESTED 5-YEAR AVERAGES

