

# We put soybeans first because you put performance first.



At Asgrow® brand, not only are we all about the beans, we're all about your success as well. That's why we offer localized products with leading genetics, weed management systems and maximum profit potential – all developed by soybean experts who put soybeans first.

### DISCOVER HOW IT'S ALL ABOUT THE BEANS.

Asgrow.com





### NORTH DAKOTA SOYBEAN GROWERS ASSOCIATION **PRESIDENT**

Justin Sherlock, Dazey | justin.sherlock@NDSGA.com

VICE PRESIDENT

Chris McDonald, Leonard | D1 | chris.mcdonald@NDSGA.com

Joshua Stutrud, Barton | D7 | joshua.stutrud@NDSGA.com

Stephanie Cook, Davenport | D3 | stephanie.cook@NDSGA.com

Dustin Helmick, Courtenay | D4 | dustin.helmick@NDSGA.com Caylor Rosenau, Carrington | D5 | caylor.rosenau@NDSGA.com Brian Jodock, Northwood | D6 | brian.jodockl@NDSGA.com Michael Doll, New Salem | D8 | michael.doll@NDSGA.com Andrew Cossette, Fargo | At-Large | andrew.cossette@NDSGA.com

**AMERICAN SOYBEAN ASSOCIATION DIRECTORS** 

Josh Gackle, Kulm | josh.gackle@NDSGA.com **Brad Thykeson**, Portland | brad.thykeson@NDSGA.com Justin Sherlock, Dazey | justin.sherlock@NDSGA.com

### NORTH DAKOTA SOYBEAN COUNCIL

Jim Thompson, Page | D4 | jthompson@ndsoybean.org

**VICE CHAIRMAN** 

Rob Rose, Wimbledon | D5 | rrose@ndsoybean.org

Evan Montgomery, Grand Forks | D7 | emontgomery@ndsoybean.org

Dallas Loff, Wahpeton | D1 | dloff@ndsoybean.org

Ted Brandt, Enderlin | D2 | tbrandt@ndsoybean.org Jeremiah Undem, Oakes | D3 | jundem@ndsoybean.org JP (John) Lueck, Spiritwood | D6 | jlueck@ndsoybean.org Milo Braaten, Portland | D8 | mbraaten@ndsoybean.org Austin Langley, Warwick | D9 | austin.langley.2@gmail.com
Adam Redmann, Saint Thomas | D10 | aredmann@ndsoybean.org Phillip Neubauer, Bottineau | D11 | pneubauer@ndsoybean.org Jennifer Meyer, Wilton | D12 | jmeyer@ndsoybean.org

### **UNITED SOYBEAN BOARD DIRECTORS**

Matt Gast, Valley City | mgast85@gmail.com Darren Kadlec, Pisek | dkadlec@polarcomm.com Cindy Pulskamp, Hillsboro | cpulskamp@rrv.net Ryan Richard, Horace | ryanrichardusb@gmail.com

### STAFF CREDITS

PUBLISHER/EDITOR

Nancy Johnson, NDSGA Executive Director nancy.johnson@NDSGA.com | (701) 566-9300

Suzanne Wolf, NDSC Communications Director swolf@ndsoybean.org | (701) 566-9300

CONTRIBUTING WRITERS

**Daniel Lemke** Stephanie Sinner Jena Bjertness Miki Miheauli

Shireen Alemadi

**CONTRIBUTING PHOTOGRAPHER** 

**Wanbaugh Studios** 

**NORTH DAKOTA SOYBEAN COUNCIL** 

4852 Rocking Horse Circle South, Fargo, ND 58104

**NORTH DAKOTA SOYBEAN GROWERS ASSOCIATION** 

4852 Rocking Horse Circle South, Fargo, ND 58104 (701) 566-9300 | www.ndsoygrowers.com

The North Dakota Soybean Growers Association and the North Dakota Soybean Council do not endorse the use of products promoted in this magazine

- Grossman Brings Government Experience to NDSGA Post
- A Year at the Helm
- Make a Difference: Serve as a County Representative for the NDSC
- NDSU Soybean Iron Chlorosis (IDC) Scores Available
- 10 Northern Corn and Soybean Expo Tentative Agenda
- 11 Sudden Death Syndrome Identified in Soybean Fields Across Eastern North Dakota
- 12 NDSC Hosts Food & Farm Tour
- 14 This Holiday Season! Unwrap the Joy of Soy
- **16 Cover Story** Turning to Autonomous Technology
- 18 Filling the Labor Void
- 19 Grant Program Helps to Address Workforce Challenge
- 20 Exploring Market Potential: U.S. Soy Leaders' Trade Mission to India

- 21 Expanding Connections: NDSC's Global Trade Missions in 2024 Soy Exports
- **22** Strengthening Global Partnerships: NDSC Hosts Philippine Trade Delegation to Expand Market Opportunities
- **23** Caring for a Farm's Most Important Asset
- **24** SoyFoam Heats Up Big Iron
- 26 Making Soy Connections Through Barbecue
- **27** Behind the Soybean Scenes
- **28** Rural Housing an Issue for North Dakota Agriculture

# epartments

- NDSGA President's Letter
- NDSC Leader Letter
- 32 Getting to Know the United Soybean Board Director
- 32 Bean Briefs
- **33** Getting to Know the Expert

# n the cover

Demonstrations of a soybean-based fire suppressant were a crowd favorite at Big Iron as Casselton and West Fargo firefighters showed how SoyFoam™ performed in a variety of applications. SoyFoam™ offers a safer alternative to many current firefighting products.

—Photo by staff



The North Dakota Soybean Grower is published six times a year by the North Dakota Soybean Growers Association, 4852 Rocking Horse Circle South, Fargo, ND 58104. Website: www.ndsoygrowers.com.

To update subscription information, please call (701) 566-9300 or email info@NDSGA.com.

Send editorial and advertising materials to Nancy Johnson, 4852 Rocking Horse Circle South, Fargo, ND 58104, nancy.johnson@NDSGA.com. Publication of editorial or advertising material in the North Dakota Soybean Grower magazine does not imply endorsement by the North Dakota Soybean Growers Association. Check agronomic advice with local sources and always read and follow product labels.



arrell Grossman grew up in North Dakota, surrounded by agriculture, but because the bulk of his professional career wasn't tied specifically to farming, he didn't always fully appreciate the influence that the industry has in the state.

"I've always had a strong appreciation for our farmers and ranchers because they're the quintessential definition of hard workers," Grossman says. "However, like many people, I probably have not ever given enough thought or credit to the folks in this state who help feed this nation, and certainly not to their hard work and frequent hardships in light of the many hurdles they endure."

After retiring in January following 30 years as the director of the North Dakota Attorney General's Consumer Protection and Antitrust Division, Grossman is embarking on the next chapter of his professional career as the new legislative director for the North Dakota Soybean Growers Association (NDSGA).

"A big part of what has attracted me to this position is the economic impact of agriculture in North Dakota," Grossman states. "I found it just absolutely astounding that the average annual impact of agriculture in North Dakota is almost \$31 billion, and that it's second only to energy in this state. The bottom line is that its critical in North Dakota that we pay close attention to facilitating, supporting and enhancing agriculture, both for economic prosperity and quality of life."

As the legislative director, Grossman will track bills, attend hearings, follow committee actions and advocate on behalf of North Dakota's farmers and ranchers based on priorities established by the NDSGA board.

In his role with the attorney general's office, Grossman worked with state agencies, legislative leaders and many others in state government, so the transition to serving as a legislative director brings him back to familiar territory.

"My stock in trade, I always felt, was when I told legislators the state of something, the needs or the problems, they could rely on that information," Grossman explains. "I hope to have that kind of an impact with individual legislators and the legislative body as a whole to continue to present that kind of credibility for the North Dakota Soybean Growers Association."

Grossman says that he's busy learning more about the issues facing North Dakota farmers as well as meeting the people who represent and lead the state's agricultural organizations. Because many rural issues transcend commodities, ag groups often have similar concerns and positions.

Grossman describes how the NDSGA is finalizing its priority issues following the November election and in advance of the North Dakota legislative session.

"We anticipate continuing to work closely with a legislature that understands and appreciates the state of North Dakota's number two economy, agriculture," Grossman contends. "We will advocate for soybean farmers and engage the legislature in critical ways that will continue to enhance and support the expansion of U.S. and world markets, provide new and innovative uses for soybeans, and fund important agricultural education and research for increased crop production and crop disease mitigation, as well as the development of important new technologies."

Grossman declares that the NDSGA will also follow zoning issues as well as the availability of and access to the state's water resources. He affirms that the organization will work to ensure that roads and bridges are maintained and improved for safe and reliable access to farms, markets and small communities.

"Soybean growers will be vigorously working to ensure the overarching viability and success of our family farmers, as well as the vibrancy of the townships and small communities that critically depend upon these farmers," Grossman states. "This includes an expanding agricultural economy in our state that's grown exponentially with value-added agriculture like soybean crush plants, biodiesel and renewable diesel, all of which enhance the value of crop production in North Dakota."

At the federal level, Grossman asserts that getting a new 5-year farm bill remains a priority.

Grossman knew he wanted to stay involved with government in some capacity, and the NDSGA's legislative director was a good fit.

"When the opportunity presented itself, I was just very excited and very grateful for the opportunity," Grossman says. "I had the possibility of some other opportunities and interests, but this is the one that struck me as the best and most meaningful use of my time."

—Story and photo by Daniel Lemke

# North Dakota Soybean Growers Association President's Letter

# What it Means

fter months of buildup and debate, the 2024 elections are over. Now we have to interpret what the results mean and how they will affect us as soybean farmers, as residents of North Dakota, and as U.S. citizens. It's an often overused and abused phrase, but elections really do have consequences.

For nearly two years, farmers and agriculture organizations have clamored for Congress to pass a full five-year farm bill. The 2018 Farm Bill has been extended previously, but it's time to get a new bill passed during the so-called lame duck session. Through retirement and by voter choice, the makeup of both the House and Senate will be changing, thereby altering who is on the agriculture committees of each chamber. Getting a new farm bill authorized during the period following the elections and prior to the start of the 2025 session is paramount. If we

enter 2025 without a farm bill, we'll be largely starting over in the process of educating committee members and their staff about the need for new, up to date legislation.

Another area of concern for us in agriculture is the need to build and strengthen our trade relationships with other countries. Protectionism may sound attractive on some levels, but we as farmers rely heavily on global markets. Neglecting to foster trade relationships and agreements with countries across the globe is hurtful to North Dakota farmers. Imposing tariffs on our trading partners ultimately hurts U.S. consumers and could result in lost markets for farmers. Given the challenging farm economy that we're currently experiencing, the last thing growers in the state need are policies that limit market opportunities.

We are hopeful that the new Trump administration will recognize the importance of open trade to agriculture and to many other sectors of the economy. Our domestic market opportunities are growing thanks to in-state and regional processing, but we're also reliant on global markets. Anything that impedes or reduces our marketing opportunities is bad news for agriculture.

On a statewide level, the Initiated Measure 4, which was defeated, would have drastically changed how important services are funded. Local governments, including cities, counties, townships and schools rely on property tax dollars to support critical services such as schools, public safety, road maintenance, public parks, water treatment facilities, city and rural fire departments and more. Instead of local government subdivisions making decisions, funding for those services would have had to come from the state, forcing lawmakers to come up with ways to replace the property tax funding. Measure 4 may have been defeated, but property tax reform remains a discussion worth having.



Justin Sherlock
President, NDSGA
Email:
justin.sherlock@ndsga.com
Website: ndsoygrowers.com

In addition to assessing the new political landscape brought about by the November elections, we're also preparing for the 2025 Northern Corn and Soybean Expo at the Butler Machinery Building on the Red River Valley Fairgrounds in West Fargo on February 5. Mark your calendar and make plans to join us for this one-day event filled with exhibitors, presenters and the opportunity for conversation with ag industry leaders. You won't want to miss it!

North	<b>Dakota</b>	1
SOV	be	
Growers Association		

# **Membership Application**

To join the North Dakota Soybean Growers Association and the American Soybean Association, complete and return this application with payment.

Name:	Do you raise:	
Spouse:	Do you currently grow soybeans? ☐ Yes ☐ No	
Date of Birth:	Soybean Acres: Total Acres Farmed:	
Farm/Company Name:	— How did you hear about NDSGA? (Please circle one)	
Address:	Recruited in person; Recruited by phone; Magazine;	
City, State, Zip:	Internet; Social Media; Mailing; Radio; Event; Other	
County:	— □ 3-Year Professional Membership: \$250 □ Retired Farmer: \$25	
Phone:	□ 1-Year Professional Membership: \$110 □ 1-Year Student: Free	
Cell:	☐ Check enclosed (please make checks payable to NDSGA)	
Email Address:	□ Credit Card: Visa / MasterCard / Discover / American Express  — Card Number:	
Occupation (Please check all that apply)	Expiration Date:/ CVC:	
□ Farmer □ Retired □ Agribusiness	Name on Card (Please print):	
☐ Finance ☐ Elevator ☐ Other	Signature:	

Mail application with payment to: North Dakota Soybean Growers Association, 4852 Rocking Horse Circle South, Fargo, ND 58104



here are periods of time that just seem to go by faster than others. For Kulm farmer Josh Gackle, his year as the president of the American Soybean Association (ASA) was one of those stretches.

"It's flown by," Gackle confides. Gackle was elected as the ASA president in 2023, becoming just the second North Dakota farmer to serve as the national president. Richard Ostlie of Northwood served in 2006-2007. Gackle will step out of the president's role and into the organization's chairmanship in December.

"The previous president told me my year as president would be over in the blink of an eye, and he was right," Gackle states. "The schedule is so packed, especially when you get into the December, January, February and March meeting schedule, and then again in the summer. There's something almost every week, so you really don't get to sit still."

Before coming back to farm with his dad and brother in 2012,

Gackle had spent time working on policy issues as a political staff member in Washington, D.C., and at the Minnesota state capitol in St. Paul. His familiarity with the political process and his desire to advocate for agriculture were a combination of factors that encouraged him to work with the ASA, the nation's soybean advocacy organization.

Gackle explains how one high-

light of his tenure as president was getting to engage on policy specific to soybean growers at a deeper level, working closely with ASA staff in Washington, D.C., and having the opportunity to advocate for the nation's soy growers. He was also able to testify in front of the U.S. House Agriculture Committee.

Nearly every day during the past year, Gackle says that he was involved with a phone call, meeting or email conversation about ASA business.

"It's been busy, but it's been productive," Gackle contends. "It's been both fun and rewarding, but it's been challenging at the same time. I really appreciated the opportunity to serve, and I feel honored that the board elected me to fill that position and to be surrounded by a really good group of fellow directors and a really good executive committee that helped share the load. I think we had a good year."

### **Familiar Frustrations**

Gackle describes how the previous ASA president and current chairman, Darrell Cates, had the goal in his year as president to get a new 5-year farm bill passed through Congress.

"As an organization, we worked our tails off to get that done, but it didn't happen," Gackle recalls, "so he challenged me to get it done in my year. That's still a possibility."

Gackle asserts that one of the biggest challenges for his term as president has been trying to



After working in Washington D.C. and St. Paul, Minnesota, Gackle returned to his family's farm in Kulm more than a decade ago.

convince Congress and elected officials about the farmer's need for them to get something done on an updated farm bill this year. Gackle maintains that there have been untold numbers of conversations, letters, emails, phone calls and in-person meetings with Congressional members and staff trying to convince those policymakers about the importance of a new, upgraded 5-year bill that meets the needs of today's farmers.

"I think we moved the needle forward," Gackle says. "I'm really proud of the fact that the one bill that has been approved by an ag committee and is waiting for action on the House floor, Congressman G.T. Thompson's bill, included a number of ASA's top priorities when it comes to a new farm bill. I'm really proud of the fact that the board and our staff worked hard to get that done. Now, we are hoping to get it across the finish line."

With no new bill in place before the election took place in November, there's still hope a farm bill can be completed before the next Congress is sworn in when education and advocacy efforts have to start all over with new members. "Chairman Thompson continues to say that there is time, and that his priority and his focus is to get that done in in the lame-duck session," Gackle explains. "There's an effort among rank-and-file house members, both on the Republican and the Democrat side, to convince House leadership to move a bill through."

### Still Involved

Although Gackle's term as the ASA president ends in December, he'll serve as the ASA chairman for another year. That role involves working with the CEO to manage the organization and to conduct meetings. He'll also remain on the ASA executive committee and will continue to interact with leadership of the U.S. Soybean Export Council and the United Soybean Board, among other groups.

"It's a really good setup that the organization has, having the vice president move into the president's role, and from there, the president moves into the chairman role," Gackle contends. "It provides some continuity and some experience, so we can share some of what we've learned."

Gackle will serve as the ASA chairman for a year, but then, his



Gackle says hardly a day went by during his presidency without a call or meeting regarding ASA business.

options are open.

"I'll be around for a couple more years, and then, we'll see what's after that," Gackle declares. "It feels good to be sitting in the combine back in the soybean fields and I look forward to that, but I'm not going to disappear."

As satisfying as the work as ASA president has been, one of Gackle's fondest memories is less about what's been accomplished and more about those leaders who have been at his side. "The other really rewarding thing about being part of ASA is the friendships that are built over time. Directors on the board are going to be some of my good friends forever now," Gackle asserts. "We stay in touch on all kinds of things. We're farming peers sharing farming stories, but we're also talking about policy, talking sports and whatever else comes up. I've made some really good friends, and that's been a really neat part of the job."

Connecting with farmers from across the country and having access to national leaders has cemented Gackle's stance that farmers have to speak up for themselves.

"I encourage farmers in North Dakota and everywhere else to just get engaged in both your state and national commodity organizations, ASA being one really good example," Gackle states. "The organizations are really only as strong as our members and the voice that they have when it comes to policy. The engagement may be something that doesn't seem important to a lot of growers, but it's a really crucial part of our success on the farm."

—Story by Daniel Lemke, photos by The Creative Treatment



Despite ongoing delays, Gackle is hopeful a new farm bill can still get done before the new Congress is sworn in.

# NDSC Service Offers a Rewarding Experience

'm entering my sixth and final year on the North Dakota Soybean Council (NDSC); my term expires next June. I was fortunate enough to be elected to the board in 2018 and have served as vice chair for the past 3 years. I can honestly say that my service on the NDSC has been a rewarding experience.

After making some changes to my farming operation years ago, I was nominated to serve on the NDSC. I enjoy being with people, and my time on the soybean council gave me a chance to meet some special people while helping to promote one of North Dakota's most important agricultural products.

I've been privileged to host a trade team at my farm while also joining other teams that came through North Dakota. Many of these visitors are customers who buy our soybeans or soybean meal. It has been enjoyable to show the delegates how we grow and care for the land and the crops we raise to ensure that we're providing a high-quality product.

For several years, I have been a non-voting member of the Clean Fuels Alliance America, an industry group that works to enhance the opportunities for ag-based renewable fuels such as biodiesel, renewable diesel and sustainable aviation fuel. It has been very rewarding to work

with industry representatives and farmers from across the country who have many of the same goals that I do. It has been my pleasure to represent soybean farmers among this group.

As a result of my experiences with Clean Fuels Alliance America, I now use B20 (20% biodiesel and 80% petroleum diesel) on my farm during the summer. I was pleased to play a part in helping the city of Grand Forks transition to biodiesel for its city buses.

A highlight of my time on the NDSC board was getting to know and to work closely with other farmers from across the state and from around the country. I was afforded the opportunity to participate in numerous United Soybean Board and American Soybean Association meetings. These farmers may come from halfway across the country and their circumstances may be different than mine, but we face many of the same issues and concerns.

My time on the NDSC has gone by fast, and I'm going to miss it when I term off. I've become good friends with current and former members of the board, and I have enjoyed working with an awesome staff. With that said, I would encourage other farmers who may be interested in serving on the NDSC to consider running. It's been a great experience learning more about the



Rob Rose Vice Chairman North Dakota Soybean Council

Email: rrose@ndsoybean.org
Website: ndsoybean.org

soybean industry and helping to make decisions that will bring a positive outcome back to the farmers of North Dakota.

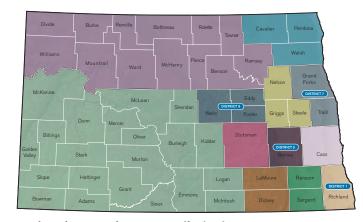
# Make a Difference: Serve as a County Representative for the NDSC

The North Dakota Soybean Council's (NDSC) 2025 election process will begin in December 2024 for the following counties:

- District 1: Richland County
- District 5: Barnes County
- District 7: Grand Forks & Traill Counties
- District 9: Eddy, Foster & Wells Counties

# How Does the NDSC Election Process Work?

Elections are conducted by mail. Soybean farmers in these counties will receive nomination instructions in December 2024 in



North Dakota Soybean Council District Map

a green envelope.

In February 2025, official ballots will be mailed in a blue

envelope. North Dakota State University (NDSU) Extension oversees the election to ensure fairness. All NDSC representatives and board members are elected by North Dakota soybean farmers.

In single-county districts, the elected producer will serve on the NDSC Board of Directors. For multi-county districts, each county will elect a representative, and these representatives will later meet, with one being chosen to serve on the NDSC board.

If you're a soybean producer in one of these counties, consider nominating a peer or even yourself for the role of county representative!

To learn more about the NDSC's election process, scan the QR code or visit ndsoybean.org



# NDSU Soybean Iron Chlorosis (IDC) Scores Available

Producers Can Use Soybean
IDC Scores to Select Soybean
Varieties for the 2025 Season

his year presented a significant challenge for iron deficiency chlorosis (IDC) due to cool and wet conditions, causing prolonged IDC symptoms in North Dakota soybean fields.

North Dakota State University (NDSU) conducts annual research on soybean varieties to determine their tolerance to IDC. This information is crucial for farmers who deal with IDC in their fields annually because farmers can use IDC scores to choose soybean varieties that are tolerant to IDC. Growing IDC tolerant variety is the first step towards addressing IDC issue.

According to Carrie Miranda, NDSU's soybean breeder, "Soybean varieties exhibit genetic differences in their tolerance to IDC symptoms. Producers can use the NDSU data to choose an appropriate IDC-tolerant soybean variety for fields known to have IDC issues in the 2025 season. Selecting a soybean variety with IDC tolerance is an important management decision that can help producers minimize the negative impact of chlorosis on yield."

In the summer of 2024, NDSU's soybean breeding program evalu-

ated 170 Enlist, GT27, Roundup Ready and Xtend soybean varieties, along with 21 conventional varieties, for IDC tolerance. IDC symptoms include yellowing of plant leaves with green veins as well as yellowing, browning and stunted growth during the early stages, leading to reduced soybean yields. The test results are based on replicated trials conducted in a location with a history of IDC. Visual ratings were made on a 1 to 5 scale, with 1 indicating no chlorosis and 5 indicating the most severe chlorosis (Figure 1).

While IDC tolerance is important, producers are advised to consider the yield potential, disease resistance and other important traits when selecting soybean varieties. Varieties with a similar IDC tolerance can differ significantly in their yield potential.

The North Dakota Soybean Council provided Funding to support the IDC rating trials.

—Story and graphic courtesy of NDSU

The test results are available by scanning the VS COR code.



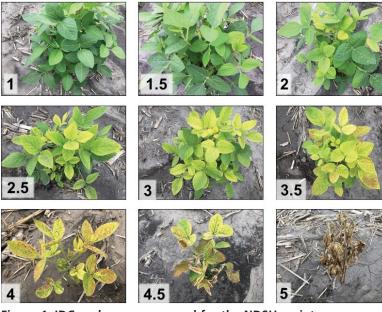


Figure 1. IDC soybean scores used for the NDSU variety trials: score of 1 is green and 5 is dead tissue.





ndlivestock.org or call 701-712-1488







Tuesday, February 4, 2025 • Butler Machinery Arena • Red River Valley Fairgrounds • West Fargo

# **Tentative Agenda**

# 8:00 a.m. | Butler Arena

Registration, Breakfast, Research Pavilion and Trade Show

# 9:00 a.m. | Butler Arena Main Stage

### Welcome

Emcee Clinton Griffiths, Ag Day Co-chair Rob Rose, North Dakota Soybean Council Co-chair Carson Klosterman, North Dakota Corn Utilization Council

# 9:10 a.m. | Butler Arena Main Stage

**Geopolitics and the Future of American Agriculture**Jacob Shapiro, Cognitive Investments

# 10:10 a.m. | Butler Arena Main Stage

**2024 Growing Season Review and a Look Ahead to 2025**Brad Rippey, USDA

# 10:55 a.m. | Butler Arena Trade Show

Visit Trade Show Vendors and Research Pavilion

# 11:25 a.m. | Butler Arena Main Stage

# How Sustainable Aviation Fuel Development Boosts Crop Demand

Jeff Davidman, Vice President, State and Local Government Affairs Delta Air Lines

# Butler Arena • Red River Valley Fairgrounds West Fargo, North Dakota



# 12:10 p.m. | Hartl Building

### Lunch

ND Corn Growers Association and ND Soybean Growers Association Annual Meetings

Visit Trade Show Vendors and Research Pavilion

# 1:25 p.m. | Butler Arena Main Stage

# **Future of Farm Machinery Panel**

Todd Pringle, John Deere Dan Dufner, CNH Chris Brossart, producer

# 2:10 p.m. | Butler Arena Main Stage

### 2025 Grain Outlook

Naomi Blohm, Total Farm Marketing

# 2:55 p.m. | Butler Arena Trade Show

Visit Trade Show Vendors and Research Pavilion

# 4:10 p.m. | Butler Arena Main Stage

# The Evolving Role of Renewable Fuels: Implications for Farmers Panel

Cory-Ann Wind, Clean Fuels Alliance America Kent Hartwig, Gevo

# 5:10 p.m. | Butler Arena Main Stage

# **Closing Remarks**

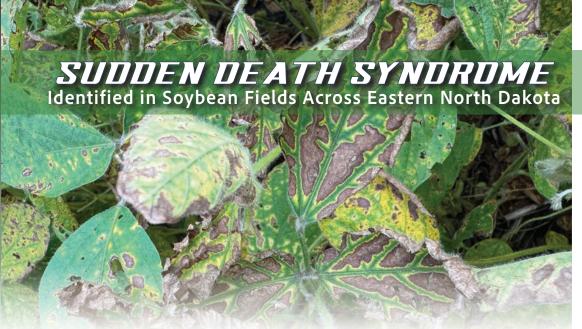
Agenda subject to change

# Plan to Attend. Plan to Learn.

For more information visit bit.ly/NorthernCornSoyExpo



Online registration opens December 2, 2024.



armers across eastern North Dakota should be on high alert for Sudden Death Syndrome (SDS) in soybeans because North Dakota State University (NDSU) experts have confirmed that the disease has spread during the 2024 growing season. Wade Webster, Ph.D., Extension soybean pathologist, and Febina Mathew, Ph.D., soybean pathologist, observed that SDS, which was first identified in Richland County in 2018 and later in Cavalier County in 2020, is becoming more prevalent. While SDS has not been a major concern in recent years, this season has shown a significant reemergence due to excessive moisture, with the disease identified in almost every soybean field scouted in Richland County. Further, SDS has been confirmed in Cass County and

Dickey County (Figure 1).

SDS is caused by the soilborne fungus Fusarium virguliforme, which infects soybean plants early in the season. Although the pathogen attacks the soybean's root system early, symptoms do not typically appear until midseason, usually during or after the R5 growth stage. At this point, the fungus produces a toxin that moves upward through the plant, causing the characteristic SDS symptoms.

One of the most common symptoms of SDS is interveinal chlorosis, a condition where the tissue between the veins of the soybean leaf turns yellow while the veins remain green. As the disease progresses, the yellow tissue eventually browns and dies. These symptoms often appear following heavy rainfall events. Once the disease takes hold, plants may drop

their leaflets, leaving the petioles attached, and die off suddenly. This loss of foliage can reduce seed fill if the disease appears early enough, leading to potential yield loss.

Sudden Death Syndrome (SDS) is particularly concerning for North Dakota due to its strong association with soybean cyst nematode (SCN). Fields with higher SCN populations are more likely to experience severe SDS outbreaks. SCN, a common pest in this region, is believed to encourage the growth of more lateral roots in soybeans. These additional roots can create extra entry points for the SDS fungus, increasing the risk of infection. Farmers should be mindful of this, as many fields in eastern North Dakota have had high SCN counts for several years.

The NDSU soybean pathology team recommends an integrated approach to manage SDS. First, soybean farmers should scout their fields regularly, particularly after rainfall events, to check for symptoms that show up during or after the R5 growth stage. The foliar symptoms of SDS can often be mistaken for the ones associated with Brown Stem Rot (BSR). A key distinguishing feature of BSR is the potential brown discoloration of the pith in the affected soybean plants. Additionally, the

roots and lower stems of BSR-infected plants do not have light blue thread-like structures (fungal mycelia). To ensure accurate disease diagnosis, Dr. Mathew recommends submitting plant samples to NDSU. The diagnostic tests for SDS and BSR have been standardized in Dr. Mathew's lab with funding from the North Dakota Soybean Council (NDSC), allowing for effective differentiation between the two diseases.

If SDS is detected, the use of soybean varieties with partial resistance is a key defensive strategy. While complete resistance is not available, partial resistance can significantly reduce disease severity.

Additionally, managing the disease with SCN-resistant soybean varieties can help limit the effect of SDS. Controlling soil compaction and ensuring good field drainage are also important because stressed plants are more susceptible to infection. Some seed treatments have shown effectiveness for preventing early season infection, leading to reduced SDS severity later in the season.

Dr. Webster emphasizes the importance of reporting SDS cases so that disease maps can be developed to track its spread. Farmers are encouraged to contact their local NDSU Extension offices or Drs. Webster and Mathew if they observe SDS symptoms in their fields.

For questions or more information, please contact: Wade Webster, Extension Soybean Pathologist, NDSU richard.webster@ndsu.edu

Febina Mathew, Soybean Pathologist, NDSU febina.mathew@ndsu.edu

> —Story, photo and, graphic courtesy of Wade Webster and Febina Mathew, NDSU

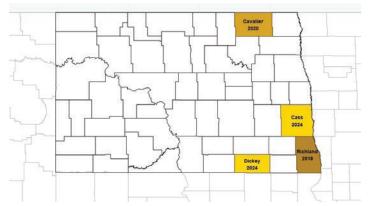


Figure 1. Sudden Death Syndrome has been identified in numerous locations across North Dakota.





n a bustling afternoon filled with fieldwork, Page farmer Jim Thompson graciously opened his combine cab to a group of curious visitors, many of whom had never experienced the soybean harvesting process or stepped foot on a North Dakota farm.

The visitors at Thompson's farm were part of the North Dakota Soybean Council Farm & Food Tour, which brings together chefs, dietitians, nutritionists, social media influencers, Extension agents, and more to learn about soybeans from farm to fork.

"A lot of them (visitors) have

never been on a farm, have never seen a soybean in a field, and most of them have never been in a combine, so the whole experience is quite amazing from the reactions that I get," Thompson says. "Some of the social media people wanted to do interviews in the combine to get answers to questions they have or, if they're a blogger, some questions that their readers have. A lot of it is dispelling some myths and just trying to get facts out there about how we produce soybeans, what they're used for, and the manner in which we do it."

The Farm & Food Tour featured more than a dozen participants from across the state and country as well as students from North Dakota State College of Science's culinary program.

"We always include a farm visit for two reasons," states North Dakota Soybean Council Outreach and Engagement Director Shireen Alemadi. "First, they can meet a farmer and ask them questions about soybeans from planting to harvest and everything in between. Second, they are able to take a ride in a combine and see how harvest actually happens and learn about how updates in technology help farmers."

In addition to the farm visit, participants also spent time in the classroom and kitchen, receiving updated soy health information from nutrition expert Mark Messina, Ph.D., director of nutrition science and research at the Soy Nutrition Institute Global, and cooking ideas from Soyfoods Council Executive Director Linda Funk. The two-day tour truly gave participants a farmto-fork experience.

"The participants learned the latest about soy; got to see how soybeans are harvested; learned about processing soybeans to ship to buyers; and, finally, they got into the kitchen to do the handson application of incorporating soy products to everyday meals

and tasting all their creations," Alemadi explains.

### **Educating Educators**

Many participants work to educate people about nutrition through dietary counseling, writing, media appearances or community health outlets. Having the opportunity to be on a working soybean farm and later to learn how to incorporate soy into nutritious recipes was a full-circle experience.

"My experience has been really eye-opening," asserts Tori Lee, community cooking coordinator at Family Wellness in Fargo. "I knew a little bit about soy before coming here, but it's been a great opportunity to try different soy foods, but also have the opportunity to have that physical application and learn more about the farmers that we have in North Dakota. Living here, it's important to know a lot about these commodity groups and the different organizations that support them."

Julie Lopez is a dietitian, chef and author who traveled to the Farm & Food Tour from New Jersey. Like many of the participants, she had never ridden in a combine before.

"This has been a really great experience, especially really learning the farm-to-table story of soy," Lopez says. "I think the farm



Participants serve up the delicious soy-based dishes they prepared during the Farm & Food Tour, blending culinary creativity with nutrition insights.

tours are such an eye-opening experience because, as a cooking instructor, I like to tell that story through my classes, and this trip has just given me a lot of new ideas to spark how to use soy in my cooking classes and get consumers excited about soy."

Emily Dudensing is a dietitian from Lubbock, Texas. She's also a farmer.

"My favorite part of the program was going to the farms and riding on the combine," Dudensing states. "We are farmers ourselves, and so that part was really neat to see how people in other parts of the United States farm, seeing their methods and comparing them to what we do. I think it hits home."

For Thompson, the visitors may have disrupted his normal fall harvest routine for an afternoon, but the event gave him an opportunity to showcase the care and attention farmers give the food they



Chef Amber Pankonin collaborates with dieticians and culinary students to whip up delicious dishes, showcasing how easy it is to incorporate soy ingredients into everyday meals.

produce for people of influence.

"I wanted to leave them (visitors) with the peace of mind that we're out here doing the best we can for the land and for the consumer because it benefits all of us to do a good job of what we do," Thompson contends. "We're educating people who have a pretty

big audience that they can educate because they've learned firsthand from someone, and they'll have video proof or picture proof and a firsthand account of how we do things, and that speaks volumes."

North Dakota dietitians, nutritionists, chefs, and other culinary professionals who want to participate in a future Food & Farm Tour should contact Shireen Alemadi at salemadi@ndsoybean.org.

To learn more about adding soy to your diet, visit soyconnection. com or thesoyfoodscouncil.com.

—Story by Daniel Lemke, photos by staff

# 2025 Western Soybean School

Join us for the 2025 Western Soybean School in Minot and Dickinson!

Discover the latest research and updates in soybean production. CEUs for Certified Crop Advisers are available at both locations on the day of the event.

# **Topics to Include Updates on:**

Soybean variety selection | Soybean diseases management
Weed control | Soil fertility and nutrient management | Cover crops
Insect control | Soybean market | Production outlook

# Minot

February 18, 2025 8:30 a.m. to 12:00 p.m. CST Location: Conference Room, North Central Research Extension Center, 5400 Highway 83 S., Minot, ND 58601

# Dickinson

February 19, 2025 8:30 a.m. to 12:00 p.m. MST Location: Stark County Family & Ag Resource Campus Office, Dakota Room Door C, 2680 Empire Rd, Dickinson, ND 58601

# Lunch is complimentary and will be served at noon.

Registration is *free* and necessary to assist in organizing food and beverage preparations.

Please register

by scanning the QR code.



NDSU

EXTENSION





# THIS HOLIDAY SEASON!

**UNWRAP THE** 

Joyof Sloy



# SANTA'S SLEIGH BELLS ARE RINGING WITH THE JOYFUL SOUNDS OF SOYBEANS!

s holiday wish lists come together, it's the perfect time to recognize that soy isn't just for food and feed: it's also a key ingredient for some of the most coveted gifts of the season. From soy-based candles to soy tires, there's something special for everyone. Adding soy products to Santa's list not only supports local farmers and communities, but it also contributes to a healthier planet.

From Santa's workshop to homes everywhere, soy-based gifts are sure to bring joy this holiday season! Discover all that soy has to offer, and

make this season truly special.

# For the Practical Person on Your List

Firefighting SoyFoam™

Do you know a firefighter?
Consider reaching out to the local department to share the news about SoyFoam™. Firefighting SoyFoam™ TF 1122 is 100% free of intentionally added per- and polyfluoroalkyl substances (PFAS), commonly called "forever chemicals." This sustainable firefighting foam will benefit firefighter health, our communities and the environment.

SoyFoam™ can also be a valuable addition to your home or farm fire protection system. The product's versatility makes it ideal for use in



Cross Plains Solutions'
Fire-Suppressing SoyFoam™
TF 1122 provides a safer fire control solution.

agricultural settings, barns and homes where fire risks may arise. Using SoyFoam™ not only promotes safety, but also supports eco-friendly, sustainable practices. Learn more at crossplainssolutions.com.

### Soy Tires

As winter approaches and icy roads become a concern, having the right tires is crucial for safety. With soybean oil incorporated into the rubber compounds, these tires offer enhanced flexibility in freezing temperatures, ensuring that the rubber stays pliable and provides superior traction on wet, snowy or icy roads: helping keep drivers safe while reducing the environmental effect.

To learn more, visit goodyear. com, and search for soy tires.

Soybean oil allows Goodyear to provide a more affordable and sustainable tire to its customers.

### Bar and Chain Oil

From under the tree to into the toolbox, chain saw users can give their equipment a sustainable upgrade with soy-based bar and chain oil. Not only is this oil a more sustainable alternative for chain saws, but

its performance has also earned widespread acclaim. With options from brands such as DeWalt\* and DPG, consumers and farmers can confidently add this eco-friendly choice to their holiday wish lists.

Learn more at soybiobased.org.

### For the Little Ones

**Babysoy Socks** 

As babies take their first steps,



Bar-and-chain biodegradable oil reduces environmental pollution compared to petroleum chain oils.



Babysoy Stay on Socks with Grips offer added safety. The grips provide traction for little ones who are navigating hard floors while the soy protein and cotton blend fabric keeps them warm, dry, and comfortable, helping to regulate body temperature during their early adventures.

To order, visit babysoyusa.com.

### Crayon Rocks

Crafted from soft soy wax and colored with natural mineral pigments, Crayon Rocks offer rich, vibrant shades. The crayon's unique shape is specifically designed to help develop and strengthen the tripod grip muscles, preparing young hands for handwriting. The easy-to-hold design encourages wide, confident strokes, building creativity and artistic confidence.

Learn more at crayonrocks.com.

## For the Furry Friends Soy-Based Shampoo for

Dogs & Cats

AllerSafe® Shampoo for Dogs & Cats is a gentle, pH-neutral formula designed to clean pets without the use of harsh sulfonics, caustics, builders or reagents. This eco-friendly shampoo is free from dyes and

fragrances that could irritate pets' sensitive skin, ensuring a safe and soothing wash for our beloved furry companions.

Learn more at gemtek.com.

# Treat Yourself to a Little Self-Care

## Smooth Soy Lotion

Formulated with age-defying botanicals, soy skin care products from Soy of Life leave your skin feeling radiant, soft and happy. The facial cream leaves the skin feeling light and healthy thanks to the sustainable ingredients.

Order online at soyoflife.com.

### Soybean Oil-Infused Lip Gloss

What is glowing skin without equally radiant lips? The soybean oil-infused lip-gloss formula not only creates a beautiful shine, but it also leaves your lips feeling soft, smooth and hydrated. The lip gloss will give you that plump look without the tingling sensation.



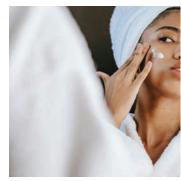
Babysoy Stay on Socks with Grips protect babies in their early walking days.



Soy-based crayons and rocks are the perfect way to add color to any child's holiday!



The soy-based pet shampoo cleans our furry companions without harsh chemicals.



Soy is one of the best ingredients for aging skin!

The soybean oil allows the skin to retain its moisture.

To purchase soy-based lip gloss, visit hudabueaty.com.

### Soy Candles

Soy candles, made from oil extracted from Midwest-grown soybeans, are an eco-friendly option for holiday gifts. These candles burn longer and cleaner than petroleum-based candles, leaving no soot behind. Beyond sustainability, using soy candles can enhance relaxation and contribute to self-care, creating a calming atmosphere that is perfect for unwinding.

Pride of Dakota, a program administered by the North Dakota Department of Agriculture, promotes local businesses, including North Dakota-based soy-candle makers. To find local soy candles, visit prideofdakota.nd.gov.

### For the Shoe Lover Soy Sandals

Take advantage of holiday time off, and hit the beach in style with Okabashi's soy-based sandals. These sustainably made sandals are not only designed for comfort, but are also built to last. The sandals will not shrink, and the colors will not fade, no matter how often you wash them.

To order, visit okabashi.com.

### Soy Sneakers

Whether you're constantly on the move or simply seeking comfort, check out soy-based sneakers. Skechers uses soy-based rubber, and the company collaborated with Goodyear® to create fashionable and better-gripping shoes.

To find Skechers with soy, go to skechers.com, and search for Goodyear Rubber.



Soy oil lip gloss adds shine and hydration.



Soy candles offer a clean, long-lasting burn—perfect for gifts.



Okabashi makes men's, women's and children's shoes from soybean oil.



Find a variety of styles in lace-ups, slip-ons and trail designs with the Goodyear® Rubber line of shoes.

Before creating your list for Santa Claus this year, consider all the soy-based products that can make the holidays more fun, sustainable and comfortable! Learn more and shop at soynewuses.org.

—Story and photos courtesy of the United Soybean Board



# Turning to Autonomous Technology

abor shortages abound in many sectors of the U.S. economy, including in supply chain and transportation. The American Trucking Association estimates a shortage of about 80,000 truck drivers by the end of 2024 with the situation likely to get worse in 2025.

The North Dakota Department of Transportation (NDDOT) estimates there are about 570,000 licensed drivers in North Dakota, and just over 49,500 have their commercial driver's license (CDL). More than 30,000 of the state's CDL license holders are



**Russ Buchholz with NDDOT** says autonomous trucks are needed.

over the age of 50.

Autonomous technology is being implemented in some sectors to make up for the driver shortage.

Autonomous vehicles are being deployed in four primary categories: people moving, long-haul trucking, business to business delivery, and within logistics yards.

"Autonomous vehicles will not be taking away jobs," Russ Buchholz, project manager, NDDOT says, "they're needed in this environment."

Buchholz was one of the presenters at an Autonomous Trucking in North Dakota conference organized by the Upper Great Plains Transportation Institute based at North Dakota State University (NDSU).

Self-driving vehicles are being deployed in numerous states already. So far, 29 states have passed regulations related to the use of autonomous vehicles (AV), including North Dakota. Some AVs are completely self-driving, while others operate with a safety driver on board in case of emergency.

According to Richard Bishop of Bishop Consulting, so-called

Mike Steenhoek (center) is executive director of the Soy Transportation Coalition.

robotaxis are conducting over 100,000 paid trips per week in places like Los Angeles, Phoenix and San Francisco. So far, robotaxis have delivered more than 22 million miles of driverless mile.

Autonomous trucks are being deployed in Texas and elsewhere to make business to business deliveries and over the road deliveries from Austin, Texas to Atlanta, Georgia. Autonomous vehicles (AV) are also being used in forestry operations in Canada as well as in mining applications across Australia and Norway.

Autonomous vehicles are also being used in North Dakota.

For the past two sugarbeet harvest seasons, Minn-Dak Farmers Cooperative has utilized AVs to deliver beets from piling sites to the processing facility in Wahpeton. A lead vehicle is driven by a human driver and data is shared with a following or platooning vehicle that is self-driving. There is a safety driver in the platoon truck to take over in case of an emergency. CHS is also operating routes in North Dakota utilizing autonomous trucks.

"Efficiency, sustainability, and labor shortages will drive the trends," says NDSU Vice President of Agricultural Affairs Greg Lardy, Ph.D.

Dozens of companies are working in the autonomous vehicle space using a wide range of technologies. Transportation experts expect artificial intelligence will increase the speed of development.

The pace of AV adoption remains to be seen. Issues surrounding uniform state and federal



**NDSU Vice President of Ag**ricultural Affairs Greg Lardy, Ph.D., gave an agriculture perspective at the Autonomous Trucking Conference.

regulations need clarification, safety protocols, infrastructure development and cyber security still need to be addressed.

"The whole challenge with having a sufficient labor force will continue to be manifest not only in the ability to grow a crop, but also to transport that crop," says Mike Steenhoek, executive director of the Soy Transportation Coalition. "That's one of the reasons why autonomous trucking is something that's certainly of interest to us and to the broader agricultural community."

Farmers are no stranger to utilizing technology and agriculture will likely adopt some level of autonomous transportation. However hurdles remain before autonomous vehicles regularly intermingle with human drivers.

"I think North Dakota, as one of the preeminent soybean-producing states, is well positioned to take advantage of the technology earlier than many other states, given the topography of the state, the population density, and then also with the increased processing that's occurring," Steenhoek contends.

"I think sets the stage for North Dakota to take advantage of it and be one of the earlier adopters, but obviously there's a lot to a lot of questions that remain."

> —Story and photo by Daniel Lemke



# **Good for Your Land** and Your Bottom Line

# **FARMER BENEFITS AND INCENTIVES**



### **Financial Incentive**

To help cover the start-up costs of cover crops, Farmers for Soil Health offers financial assistance of up to \$50/acre over a three-year period.



# **Exclusive Marketplace**

Enrollment in Farmers for Soil Health provides access to an exclusive future marketplace connecting farmers to top-tier supply chain partners that are focused on sustainability.



### **Technical Advisor**

Each state has dedicated on-theground technical advisors to provide research-based information and educational resources to aid in the transition of your field.









# Filling the Labor Void

abor shortages are a vexing issue for many sectors of the U.S. economy, and agriculture is not immune to the struggles. One avenue which some ag producers and farm businesses travel to fill agricultural jobs is the H-2A Temporary Agricultural Worker program.

The H-2A program allows U.S. employers or U.S. agents who meet specific regulatory requirements to bring foreign nationals to the United States in order to fill temporary agricultural jobs. To qualify, ag producers must offer a job that is of a temporary or seasonal nature; demonstrate that there aren't enough U.S. workers who are able, willing, qualified, and available to accomplish the temporary work; and demonstrate that hiring H-2A workers won't negatively affect the wages and working conditions of similarly employed U.S. workers.

Whether it is for workers to accomplish spring planting and fall harvesting, potato processing, cattle ranching or even beekeeping operations, the interest for employing H-2A workers has steadily increased in North Dakota.

"We have very large demand, which has increased year after year," says Shantel Dewald, senior program administrator for Job Service North Dakota. "I've worked with the program since April of 2020, and we've almost doubled the requests from when I started, which is significant. So far this year, we're at just over 1,200 applications."

To start the H-2A process, the farmers apply for a temporary labor certification with the Department of Labor's Office of Foreign Labor Certification between 60 and 75 calendar days prior to the date they need work to start. The local State Workforce Agency (Job Service North Dakota) then places a domestic job order on its site to attempt to recruit American workers. This step must be done before the application is approved by the U.S. Department of Labor. If no American workers apply for the position, the U.S. Office of Foreign Labor Certification provides the farmer with its final determination.

"One of our primary functions is to ensure these jobs are advertised to American workers," adds Sam Harrison, senior program administrator for Job Service North Dakota. "We have to make sure that jobs are advertised properly and that anybody who applies for it as a domestic worker is interviewed if they're qualified."

Harrison explains how Job Service North Dakota and U.S. Department of Labor analysts also monitor the wages offered so that the H-2A process isn't used to undercut the wages of American workers.

Dewald states that the H-2A application process hasn't changed much in recent years, although Job Service North Dakota has streamlined its internal systems to help the application process go as smoothly as possible. Worker housing provided by the employer for agricultural employees receives a quality inspection by Job Service North Dakota staff. In the first 10 months of this year, Job Service North Dakota staff completed 1,615 inspections while driving over 75,000 miles.

H-2A worker requests come from across the state, but there are areas of North Dakota with higher demand.

"Certainly, we do have busier areas than others in terms of our housing inspections, and that's really the best way for us to gauge where these workers are going," Harrison maintains. "I would say the northeast region and the southeast region of the state are the heaviest."

Even though the H-2A process can be complicated, there's no cap on the number of worker visas that are approved through the program.

"Typically, we see an ag producer apply for H-2A and get it because our farm work is seasonal, and that's the biggest requirement," Dewald contends. "As long as they have housing that meets the Department of Labor standards for these workers, and they have the work, there's no reason

why the ag producer wouldn't be granted a visa."

Because the application process and finding foreign workers can be complex, it's recommended that ag producers use an agent to navigate the system, especially if they're new to the worker visa program.

"Most of our ag producers go through an agent because the agents know where to find qualified workers in these other countries," Dewald says. "Some ag producers think that you're not going to be able to find someone who knows how to operate their equipment, but surprisingly, they can."

Ag producers and agribusinesses aren't required to use an agent, and there are online resources through the U.S. Department of Labor and the U.S. Department of Agriculture.

Dewald states that, even though North Dakota is in the top five states for the volume of H-2A applications received each year, federal support to navigate the process hasn't kept up. However, the governor's office and the state legislature provided additional support during the last session.

"They (lawmakers) know about our programs and completely support them," Dewald explains, "so they provided some additional funding for us in the form of two full-time equivalent positions so that we can continue to support local farmers and to keep these programs going."

To learn more about the H-2A visa program, visit farmers.gov/working-with-us/h2a-visa-program.

Information about assistance through Job Service North Dakota is available at jobsnd.com/about us/programs-we-offer.

—Story by Daniel Lemke, photo by The Creative Treatment



Farmers and ag businesses across North Dakota are increasingly turning to foreign workers to fill labor shortages.

# **Grant Program**

# Helps to Address Workforce Challenge

usinesses of all sizes and types face workforce issues that, in some cases, are limiting the enterprise's growth and profitability. North Dakota is squarely in the middle of the workforce challenge for many sectors, including agriculture.

"We have the biggest workforce crisis in the United States right now based on numbers, and our number one industry is agriculture," says Jane Vangsness Frisch, Ph.D., vice president of workforce at the Fargo Moorhead West Fargo Chamber of Commerce. "Within agriculture there is a diversity of jobs, everything from the individual who serves the food at a restaurant to the individual who is driving the truck in the field for harvest. The vastness of diverse skills that are needed is one of the biggest struggles that we have here in North Dakota.

Every aspect of farm to table is in need of a skilled workforce."

The Fargo Moorhead West Fargo Chamber of Commerce is offering a grant program that is intended to help alleviate worker shortages by helping to train skilled workers. The chamber received \$9.62 million in a federal grant through the Economic Development Administration (EDA) to establish the Good Jobs Challenge, which is intended to enhance and to engage historically excluded populations in the region, which includes all of North Dakota and northern Minnesota.

"Our goal is to ensure that we have a competitive and engaged workforce," Vangsness Frisch states.

The funding goes directly to individuals and companies to upskill, educate and train individuals in advanced manufacturing, information technology and cybersecurity, and agriculture.

Grants of \$5,000 are available for eligible individuals to increase their skills, to earn a certificate, to receive training or to complete their education.

Qualified applicants include new Americans; a person who has been or who has had an immediate family member who has spent time, or is currently, in jail, youth correctional facilities, or prison; a veteran or current service member; a person of color; or a high school student.

"Those demographic characteristics are typically those who are underemployed within our region," Vangsness Frisch explains. "We're really striving with this \$5,000 to get them upskilled into what is considered a good job. It really means providing an individual upward mobility in the industry that they're currently in, and that's why we focused on those three main industries."

Vangsness Frisch describes how individuals who want to increase their skills can apply for the Good Jobs Challenge. Small business owners, including agriculture producers, can identify either an individual or a cohort of individuals that they would like to upskill. Vangsness Frisch says that the chamber, through the Good Jobs Challenge, can help connect workers with an education and training partner, such as Grand Farm, Minnesota State Community and Technical College, or the North Dakota State College of Science.

Individuals who are currently in training or education programs and who may have some barriers to finish that training are also eligible. That group could include high school students who want to get their commercial driver's license before graduating high school.

"It might be an individual

who's completing their certificate or their two-year degree in agronomy from a local community college or two-year college. We can figure out their eligibility and help them get to that finish line of going into the workforce," Vangsness Frisch states.

The Good Jobs Challenge funding can be used to help with tuition and fees, but it also can be used to reduce barriers such as childcare as well as access to tools and equipment to get through the program.

Vangsness Frisch asserts that one of the program's desired outcomes is to get workers into jobs that pay \$45,000 a year or more.

The EDA grant will expire in September of 2025. Vangsness Frisch explains that the goal is to get about 900 individuals through the Good Jobs Challenge. About 200 people are in the program, and 25 have already completed their training.

"Individuals wanting to know more can reach out to us through our website," Vangsness Frisch adds. "Whether they are an individual who's wanting to be upskilled or maybe they are a producer that's looking for one individual or maybe they want to get that that one hired individual on their farming operation a little bit more skills, they can fill out the application. No two workforce situations are the same, so we really try to guide and mentor on a one-on-one basis through the Good Jobs Challenge program."

—Story by Daniel Lemke, photo provided by Fargo Moorhead West Fargo Chamber of Commerce

To learn more about the Good Jobs Challenge or to apply, visit fmwfchamber.com/good-jobs-challenge



Jane Vangsness Frisch, Ph.D., is vice president of workforce at the Fargo Moorhead West Fargo Chamber of Commerce.



n the state of Karanataka, in the southwest part of India, lies the heart of a booming poultry industry. In early October, a group of state soybean organization executives, including North Dakota Soybean Council Executive Director Stephanie Sinner, ventured on a trade mission to Bengaluru (Bangalore), accompanied by the U.S. Soybean Export Council (USSEC). Over an action-packed four days, the team aimed to understand market dynamics, to build relationships with industry leaders and to explore the market potential for U.S. soy.

With a population of 1.4 billion, India is on a rapid growth trajectory and is the world's most populous country. The delegation met with key stakeholders and industry associations, such as the Compound Livestock Feed and Manufacturing Association (CLF-MA), Srinivasa Farms, Nandus, Cargill and others.

### **Solving Challenges**

India has emerged as a significant player for global food systems, ranking as the world's largest milk producer, second largest aquaculture producer and third largest egg producer. These impressive numbers show the potential that U.S. soy can unlock as an affordable feed ingredient, provided that there is market access.

Although a leader globally, India's high cost for production—mainly due to high feed costs—makes its export offerings, such as shrimp, less competitive in the global export market. By allowing for imports of affordable, high-quality feed such as U.S. soy, India can strengthen its position globally and can continue to expand its export portfolio.

# **Building a Future-Ready Workforce**

U.S. soy leaders also used this opportunity to promote the USSEC's Soy Excellence Center (SEC) in India. With 65% of its population under the age of 35, building the skills of India's young workforce in the protein industry can drive innovation and improve food security. The SEC's mission also aligns with Prime Minister Modi's "Skills India" initiative. These similar goals set India's agriculture economy up for success. In August 2024, the SEC and Karnataka Poultry Farmers and Breeders Association (KPFBA) signed a memorandum

of understanding (MOU) to upskill India's poultry industry.

# Sowing the Seeds for a Brighter Tomorrow

India and the U.S. have enjoyed a long-standing trade partnership, with the trade of goods and services valued at \$191.8 billion in 2022. USSEC initiatives, such as the SEC and trade missions, nurture relationships and position U.S. soy as partner in emerging markets like India.

"This trade mission to India was an incredible opportunity to explore the market potential for North Dakota and U.S. soybeans in one of the fastest-growing economies in the world," says Stephanie Sinner. "Meeting with key industry leaders and stakeholders allowed us to strengthen relationships and highlight the benefits of our soy as an affordable, high-quality feed ingredient. India's dynamic growth in the protein industry, combined with initiatives like the Soy Excellence Center, is paving the way for future partnerships that benefit both India's growing market and American soybean farmers."

—Story and photos courtesy of the USSEC



NDSC Executive Director Stephanie Sinner (center) stands alongside U.S. Soy leaders and key industry stakeholders in India during a trade mission to explore market opportunities for North Dakota and U.S. soy in the growing Indian poultry sector.



# EXPANDING CONNECTIONS:

# NDSC's Global Trade Missions in 2024

n 2024, the North Dakota Soybean Council (NDSC) strengthened international ties and expanded market opportunities through a series of impactful trade missions.

These efforts showcased the high quality of North Dakota soybeans, fostering relationships with global buyers and positioning NDSC for future growth and market success.

### 2024 Highlights:

- Trade Teams: NDSC engaged with 8 international teams.
- Companies Involved: Over 125 companies participated.
- Countries Represented: 19

countries, including China, Vietnam, Philippines, Taiwan, Cambodia, Myanmar, Indonesia, India, Egypt, Bangladesh, Japan, Thailand, Canada, South Korea, and more.

# Where in the World do North Dakota Soybeans Go?

The majority of North Dakota's soybeans are exported through the Pacific Northwest ports, primarily destined for Asia. Here are some of the key markets:

# China

# **Projected Consumption:**

112 million metric tons (MMT) — mainly whole beans crushed domestically for soybean meal (SBM).

Projected 2024/25 Imports: 109 MMT.

U.S. Market Share: 24%.

# **Projected Consumption:**

7 MMT — mostly SBM, with some whole beans and sov foods.

Projected 2024/25

Imports: 2.5 MMT SBM / 2.5 MMT whole beans.

U.S. Market Share: 19%.

# Taiwan

# **Projected Consumption:**

2.8 MMT — primarily whole beans.

Projected 2024/25 Imports: 3 MMT.

U.S. Market Share: 68%.

# Phillippines Projected Consumption:

2.6 MMT SBM — mainly a soybean meal market.

Projected 2024/25 Imports: 3 MMT.

U.S. Market Share: 81%.

With such a diverse and expanding market presence, NDSC continues to strengthen its global footprint, ensuring North Dakota soybeans meet the growing demands of international consumers.



# **Strengthening Global Partnerships:**

NDSC Hosts Philippine Trade Delegation to Expand Market Opportunities



n early September, the North Dakota Soybean Council (NDSC) hosted a trade delegation from the Philippines, the largest importer of U.S. soybean meal. The group's visit was part of an ongoing project managed by Ritz Ag Consulting, Inc., collaborating with several state soybean organizations, including the North

Dakota Soybean Council (NDSC) to promote and market U.S. soy to Asia through the Pacific Northwest (PNW). The tour allowed traders, business owners, feed millers and other stakeholders to gain deeper insights about the North Dakota soybean industry, reinforcing the importance of the relationship between the Philip-

pines and U.S. soy.

The group visited the NDSC office, where they received a briefing from Executive Director Stephanie Sinner on the North Dakota soybean industry, the changing landscape of North Dakota soybeans and the relevance for customers purchasing from the PNW. This harvest marked a significant milestone for the North Dakota soybean industry, with two soybean crush plants now in operation. These plants are supplying soybean meal to the PNW export market, destined for customers in Southeast Asia.

After receiving a briefing about the North Dakota soybean industry, the group toured the Northern Crop Institute (NCI) Feed Production Center. The NCI Feed Mill provides education and training for young professionals in the field, which resonated with the audience because the Philippine delegation included emerging leaders and traders. Engaging with

the feed mill's staff about equipment brands and operations was a distinctive experience.

Because North Dakota soybeans rely heavily on rail to reach their export market via the PNW, the group visited the Arthur Companies-Pillsbury Terminal. During a walking tour of the terminal, delegates observed how the North Dakota Grain Inspection (NDGI) conducts quality inspections, emphasizing the importance of maintaining high-quality standards. The delegates also learned how shuttle-loading stations store crops while preserving quality from on-farm storage, ensuring they meet export market demands.

The day's final stop was a visit to NDSC Chairman Jim Thompson's farm near Page. The group was given a history of Thompson's farm, an overview of the growing season, a forecast for the upcoming harvest, and a tour of his farm and equipment. North Dakota soybean farmers always want to produce sustainable soybeans of the highest quality that meets the needs of U.S. soy customers. The ability to foster personal conversations and connections between the end user and the producer is an invaluable aspect of these trade exchange programs.

As North Dakota gets closer to becoming a major soybean meal producer and exporter, the timing of this trade visit from the Philippines was prudent and productive. The NDSC invests checkoff dollars into programs that enable directors and staff to showcase the quality and reliability of North Dakota soybeans worldwide while fostering lasting relationships with end users. The exchange of ideas and processes can only truly happen through in-person discussions and observations, making these trade group visits invaluable.

oup visits invaluable.

—Story courtesy of Ritz Ag

Consulting, Inc, photos

by staff and USSEC



The Philippine trade delegation visited the NDSC office in Fargo for a briefing on the North Dakota soybean industry and its significance for customers in the Pacific Northwest.





all harvest and the holiday season have something in common: they can be enjoyable and challenging at the same time. There are also times of the year when stress can be elevated.

"November through April is typically the time when we see the highest demand and usage of mental health services in agriculture," says Sean Brotherson, Ph.D., North Dakota State University (NDSU) professor and Extension family science specialist. "That's typically because harvest season has been completed, people have more time and they're doing some of their planning for the next season, so some of those financial stresses and questions are coming up. People are looking for resources that can help them with their preparation and planning during the off-season."

Brotherson describes how agriculture is an industry that typically deals with fairly high-stress levels. North Dakota farmers are facing a challenging farm economy, complete with low commodity prices that, in some cases, are below the cost of production. Brotherson expects many farmers to face additional mental burdens this year.

"Financial stresses are typically the tip of the spear when it comes to reasons for farm stress, and the indicators we have right now basically seem to suggest we're facing a more volatile year economically in agriculture," Brotherson explains.

### **Telltale Signs**

Brotherson states that stress can manifest itself in many ways, including through tension, fatigue, headaches, neck aches, or backaches. There may be appetite issues or sleep difficulties. People will often have difficulty concentrating because they're feeling distracted by their concerns. There may also be signs of strain in relationships with family members or coworkers.

"Signs of concern can show up in different ways," Brotherson asserts. "I often relate it to the analogy of paying attention to the check engine light on the dashboard of your vehicle. It may not tell you the exact thing that is wrong with your engine or what is a concern, but it does alert you to the need to slow down, take it in and get checked."

Brotherson maintains that there are several reasons why people, especially farmers, may be hesitant to seek help. First, they may not know about the available resources. Additionally, they may think that the necessary resources won't be available in their local communities. There's also the desire for anonymity and the stigma that sometimes comes with seeking

help for mental health issues.

Brotherson illustrates how there are many resources available to help people access the needed mental health support.

One of the first resources is a statewide North Dakota helpline that is available by calling 211. Administered by First Link, the helpline can provide immediate crisis assistance. Brotherson also encourages people to contact a local health provider. There are resources available via in-person or telehealth channels.

Additional resources are available by scanning the QR code.

"NDSU Extension has grant support through the U.S. Department of Agriculture to refer people to agricultural health counseling supports," Brotherson adds. "The provider for that is Together Counseling, and those counseling services are available at no cost or limited cost."

The Farm to Farm support program of Together Counseling is available at farmtofarmnd.com.

Additional resources are available through the United Soybean Board. The American Soybean Association has resources available to farmers by scanning the QR code.

### **Important Asset**

Farmers are diligent with the

care of their land and livestock, yet their most important asset may be overlooked.

"The most important asset that people in any farm or ranch operation have available to them is their health, and their health is what they depend on to be resilient during times of stress," Brotherson says. "It's what they depend on to be able to function every day. So, if it's your most important resource or asset, then it also needs to be your most important priority. The really positive thing about having a focus on self-care and health is that it is one of the few factors. when you're working in agriculture, that you can control."

While farmers may be hesitant to seek help or assistance for their mental health, Brotherson draws a parallel with hiring a crop adviser.

"In both cases, you're concerned about a health-related issue," Brotherson states. "In one case, it's the health of your farm operation or your crop, and the other it's your health or the health of those you're working with. At the end of the day, the farm is important, but the health and well-being of those working on the farm is even more important."

—Story by Daniel Lemke, photo courtesy of USB



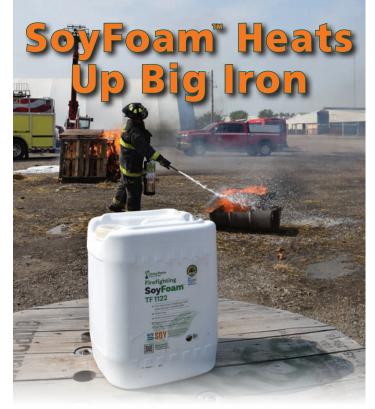
ost people are accustomed to seeing the latest implements and new product displays at farm shows, but they may not expect to witness firefighting demonstrations. Attendees at Big Iron, held September 10-12 at the Red River Valley Fairgrounds in West Fargo, experienced live demonstrations of an innovative fire suppression product relevant to agriculture.

SoyFoam™ is a soybean-based fire-suppression product that was developed by Cross Plains Solutions. The product is free of polyfluoroalkyl substances (PFAS), so-called forever chemicals, that are frequently used for fire suppression. PFAS can leak into the environment, and exposure to PFAS has been linked to numerous negative health effects, including cancer and thyroid dysfunction.

Dave Garlie is the chief technology officer for Cross Plains Solutions and was one of the primary SoyFoam™ developers. He has years of experience as a research scientist working with agricultural products.

"We know there's a very specific need to get rid of PFAS in firefighting foams," Garlie says, "so we saw an opportunity to repurpose something that's soy-based into a functional system that addresses a lot of issues."

Because SoyFoam™ is soy-



bean-based, Cross Plains Solutions has been supported by the United Soybean Board and several state soybean boards, including the North Dakota Soybean Council (NDSC).

### **Seeing is Believing**

Cross Plains Solutions' presence at Big Iron included demonstrations of how SoyFoam™ performs on several types of fires, including a pallet stack, a fuel fire and a brush fire.

John Hejl serves as the fire chief for the city of Casselton and is also a soybean farmer. He describes how he'd been looking for years to find an alternative to the chemical-laden products that had been used until SoyFoam™ became available.

"We know the stuff that we had been using for a number of years is bad for the environment and bad for us," Hejl explains.

Beyond being a healthier alternative, the product had to be effective.

"Number one, it had to work, but I was also looking for something that was more healthy," Hejl asserts. "I was also looking for something that we could use with our current equipment and not have to have a huge expense of changing out pumps or getting

new nozzles or something else expensive and new to come along with it. So far, this product has checked every one of those boxes."

Chief Hejl and Captain Chris Prochnow from the Casselton Fire Department narrated the live Big Iron firefighting demonstrations that were conducted by the West Fargo Rural Fire Department led by Chief Steve Baron. The demos showed onlookers how the product worked with different equipment and in different real-world situations.

"We did a handful of different materials," Hejl states. "We used SoyFoam" as a class A wetting agent, so you could stop your controlled burn; you could use it for hay or straw bales. We also used it on some diesel fuel and some tires because those are things that especially rural fire services come across every once in a while."

Hejl says that a lot of rural fire departments are comprised of farmers, so it only made sense to demonstrate what the soy-based product could do. However, the product's value goes beyond helping rural departments.

"I've had a handful of departments call me just to ask how it works through our trucks and our systems to see if it's compatible with theirs," Hejl explains. "It's starting to spread into some of the larger departments, not just the volunteer side of things. Career departments are looking for something just like us that is free of the fluorines, free of the carcinogens, so they can use it and know that they're not harming themselves or the people they're trying to protect."

"The demonstrations were very well received, so the community could come and see how fire trucks work and how real fires are put out, but also it allowed us to share the message how we can address the health concerns with something that's clearly more friendly environmentally and safe," Garlie adds.



Big Iron visitors watched SoyFoam™ in action as the soy-based suppressant was used to douse fires on a range of materials including pallets and fuel.



### **Gaining Traction**

NDSC Outreach and Engagement Director Shireen Alemadi noted that the Big Iron demonstrations were a hit with attendees, and the presentations attracted the attention of numerous volunteer and career fire departments that had representatives there to watch.

The NDSC is supporting and promoting SoyFoam™ by offering a 5-gallon pail of product to North Dakota fire departments that want to give the product a try.

"We are seeing a lot of interest across the whole state," Alemadi states. "Departments are really interested in trying something that not only works really well but is not hazardous to their health. Big Iron helped people see SoyFoam" in action and learn more about it, and departments are talking to each other about it and spreading the word."

Garlie explains that a number of fire departments in Kentucky, Wisconsin and North Dakota have already converted from their old products to SoyFoam™ with



The Big Iron Committee awarded the North Dakota Soybean Council and Cross Plains Solutions Outstanding Exhibitors for their SoyFoam™ fire demo at Big Iron.

departments in several other states pondering a change. The product is also being tested and certified so that large departments, such as the ones in Chicago, Atlanta and New York City, would be able to use the soy-based suppressant.

While Cross Plains Solution developed the SoyFoam™, Garlie credits firefighters for the inspiration.

"They (firefighters) just told us what to build," Garlie contends. "If we can repurpose what's readily available today and create a new market, a new demand for it globally, and in parallel touch safety, community and the environment, it's a win-win for everybody."

North Dakota fire departments interested in receiving a free 5-gallon sample of Soy-Foam™ can contact NDSC by visiting ndsoybean.org.

—Story by Daniel Lemke, photos by staff



The NDSC is making pails of SoyFoam™ available to North Dakota fire departments that want to try it.

# 2025 Best of the Best in Wheat and Soybean Research

January 29, 2025 - Grand Hotel, Minot, N.D. February 5, 2025 - Alerus Center, Grand Forks, N.D. February 6, 2025 - Courtyard by Marriot, Moorhead, MN

The annual Best of the Best in Wheat and Soybean Research workshop offers growers a free chance to learn the latest in checkoff-supported wheat and soybean production from researchers and Extension specialists. Featured session topics include: Weed control, pest management, weather issues, soil health and more!

The Best of the Best is sponsored by the MN
Association of Wheat Growers, MN Wheat
Research & Promotion Council, MN Soybean
Research & Promotion Council, ND Soybean
Council, ND Grain Growers Association and ND
Wheat Commission.







he 13th annual North
Dakota BBQ Championship drew competitors
from across the U.S. and
Canada to Fargo for some tasty,
but spirited, competition. The
event also provided a fun and
engaging way to connect consumers and barbecue competitors with
the value of soybeans.

Hillsboro farmer and United Soybean Board (USB) director Cindy Pulskamp had a front-row seat at the competition, serving as a judge for the Kansas City Barbecue Society (KCBS) sanctioned event. When USB began partnering with the KCBS, the USB directors were given the opportunity to be trained so that they could serve as judges for the barbecue competitions. After about 6 hours of training, Pulskamp became a certified judge.

"As events came about in your area, the KCBS would contact you to see if you'd like to be a judge," Pulskamp says. "North Dakota had not had an event in years, so it was a no brainer for me. I was really, really excited to be selected as a judge."

Competition fell into several categories, including pork, chicken, brisket and ribs.

"There are some people who are really, really good at what they do, and in this competition, you can taste it," Pulskamp contends. In addition to having Pulskamp serve as a judge, the North Dakota Soybean Council (NDSC) helped sponsor the event and even provided the NDSC Soy Combine Awards, which were a "Best in Show" award for the teams with the highest combined scoring across pork, ribs, and chicken, which are all soy-fed proteins.

"Soy is an integral part of barbeque, with 96% of all U.S. soybean meal being used in animal feed to provide vital nutrition for pigs, chickens and turkeys," states NDSC Outreach and Engagement Director Shireen Alemadi. "We wanted to be there to represent all the awesome North Dakota soybean farmers who help feed the meat we eat."

Pulskamp explains how some of the competitors wondered why a soybean farmer was part of a barbecue event. "When I had the opportunity to visit with the competitors, they wondered why someone from the soybean world was standing in front of them," Pulskamp recalls. "I said, not only am I a judge, but I grow what your protein eats. So, the theme is, we're the protein that your protein eats."

Soybean meal is an integral part of feed rations for pigs, chickens, dairy and even aquaculture, so the meat which the competitors were using was likely soy-fed.

"One competitor said he had never thought of that connection," Pulskamp adds. "He was just looking for the best cut of meat to make the best product he can. I told him that's why we walk hand in hand because I am out there making sure that I'm producing the best soy protein I can that will feed you or your protein so that you can find the best cut of meat."

"The message that soybeans are your protein's protein was mentioned at the teams' meeting, the judges' meeting and also on the stage before all the awards were handed out," Alemadi says.

In addition to connecting with the competitors, the NDSC also had a booth to connect with people from the community who came to the Scheels North Dakota BBQ Championship event.

"We wanted to make the connection that soybeans are an important part of the diets of pigs, chickens and turkeys, and we also shared information on the many other ways soybeans show up in your everyday life, including tires, shoes, biodiesel, vegetable oil and much more," Alemadi explains.

Pulskamp describes how the North Dakota BBQ Championship was a fun way to highlight the many ways that soybeans contribute to everyday life.

"I think, as North Dakota soybean farmers, sometimes we don't even make all the connections in our mind of where all of our products go when we sell them," Pulskamp contends. "This is just one of the ways that the United Soybean Board and North Dakota Soybean Council utilizes checkoff dollars. It's to help educate the public of the products that they're eating and the food safety and stability, and also the sustainability that the farmers have around here. Checkoff funds help open people's eyes to this type of information in a fun way, and this



Hillsboro farmer Cindy Pulskamp (center front), a United Soybean Board director served as one of the competition judges.



was a very fun way."

Jeff Vanderlinde's Shiggin' and Grillin' team took the top honors at the Fargo event. Vanderlinde hails from Delano, Minnesota. He's earned over 50 grand champion and reserve champion titles from competitions, and he's also a 6-time world champion.

Growing up as a farm kid, Vanderlinde understands and appreciates the connection between soybeans and the products he cooks.

"I'm amazed at the education that people are putting in because not a lot of people would have made the connection," Vanderlinde states.

Vanderlinde also appreciates the partnership that the KCBS has with the USB.

"It's a great partnership, not just because of the sponsorship that they provide, but for the education they do on the soybeans," Vanderlinde adds.

Shiggin' and Grillin' was followed in second place by Son of a Boar BBQ from Wisconsin, and North Dakota's own Owens BBQ earned third place.

> —Story by Daniel Lemke, photos by staff



Pulskamp (center) presented the N.D. Soy Combine award for first place to Shiggin' and Grillin' from Delano, Minnesota.

# Behind the Soybean Scenes

he North Dakota Soybean Council (NDSC) is governed by a board of farmer leaders who have been elected to oversee the investment of soybean checkoff funds. Behind the scenes is a team of dedicated, professional staff who manage the council's daily operations and ensure the implementation of the board's directives.

### **Kim Parisien**

### Finance and Compliance Administrator

Kim Parisien serves as the NDSC's finance and compliance administrator. Parisien didn't grow up on a farm but was surrounded by it while growing up in Belcourt, North Dakota. She earned



Kim Parisien joined the NDSC staff as finance and compliance administrator in 2023.

Bachelor of Science degrees from North Dakota State University in both accounting and management information systems.

Parisien worked for approximately 8 years at the Turtle Mountain Manufacturing Company, gaining experience in various roles, including inventory, production planning/expediting, and all areas of the accounting department. She also worked at Noridian Administrative Services for 8 years and spent nearly 12 years at Belcourt School District 7 as the high school's business technician before joining the NDSC in July 2023.

"The fact that I knew nothing about soybeans, yet was very familiar with the financial side of things, intrigued me," Parisien says about joining the NDSC staff.

Her main role is working with finances, such as accounts payable, accounts receivable, budgeting, financial reporting, and managing the soybean checkoff remittance process.

"The best part of my job is working with some very intelligent, diverse and amazing people on a day-to-day basis," Parisien asserts.

Parisien has lived in Fargo for approximately 20 years and has three children.

### Shireen Alemadi

### Outreach and Engagement Director

Shireen Alemadi grew up in south Fargo and joined the NDSC as the outreach and engagement director in 2021. She has a bachelor's degree in biology from Minnesota State University Moorhead (MSUM) and a Master of Science in biology from the University of Central Florida in Orlando.

"My grad research focused on fish dispersal," Alemadi states. "I was fortunate to have my research accepted for publication in scientific journals."

"For most of my career after graduate school, I was at MSUM as a faculty member in the Biosciences Department, teaching a wide variety of courses for students," Alemadi explains.

Alemadi also served as MSUM's director of the College for Kids & Teens program. She also collaborated with HealthForce MN to start Scrubs Camp at MSUM.

Alemadi was part of the 2016 United Way of Cass-Clay 35 Under 35 Women's Leadership Program and was a Fargo Moorhead YWCA Women of the Year nominee in 2016.

Although she didn't grow up on

a farm, Alemadi was exposed to agriculture through her extended family, so the opportunity to join the NDSC seemed like a good fit.

Alemadi's wide-ranging responsibilities include supporting the NDSC with program development and execution; working with industry partners, producers, teachers, students and consumers on soybean-related programs; and helping extend the reach of checkoff resources.

"The best part of my job is supporting all the amazing North Dakota soybean farmers," Alemadi states.

> —Story by Daniel Lemke, photos by staff



Shireen Alemadi has served as NDSC outreach and engagement director since 2021.



# Rural Housing

# an Issue for North Dakota Agriculture

ural housing became a front-burner issue several years ago when the shale oil boom brought a sudden influx of workers to western North Dakota, where adequate living spaces to keep up with the rapid growth didn't exist. The state's agriculture industry may not be experiencing a boom of that magnitude, but experts maintain that a lack of adequate housing is affecting the state's rural economy and is constricting the ability for businesses and communities to grow.

For rural North Dakota, the challenges are complex. Not only is there a lack of available housing in many areas, what does exist is often aging and may not meet consumer needs. The construction of new homes or rental units in rural communities is often limited because contractors are hesitant to build speculative homes that they may not sell and because municipalities are reticent to make significant infrastructure investments for housing if those dwellings aren't going to be developed. Those issues are among the factors contributing to the statewide housing challenges.

### Region 4 Snapshot

The Red River Regional Council (RRRC) recently completed an eight-month study of Region 4 housing needs through the Red River Community Housing Development Organization (CHDO). Region 4 includes Grand Forks, Pembina, Nelson and Walsh Counties. With surveys and focus group participation, the CHDO received feedback from hundreds of residents and business leaders.

Among the findings, the RRRC

study revealed that 52% of the responding businesses plan to hire additional staff in the next 12 months and that 70% of the responding business owners believe their future depends upon the development of additional suitable housing in the community.

The study showed that nearly 4,800 homes are needed in Region 4 just to meet the current workforce demands. Employers cited new entry-level homes and lease-purchase home-ownership opportunities as the top strategies to help attract and keep the necessary employees.

"Things that rose to the top were challenges in agriculture, but also education and health care are facing real challenges in recruiting the staff that they need and housing people," says Lisa Rotvold, Red River CHDO executive director. "Ag, health care and even education are also leaning into using foreign-born workers

to fill positions that they can't fill with local people, and recruitment is very much being restricted by a lack of housing."

A 2022 statewide housing-needs assessment showed that North Dakota's population increased from 672,000 in 2010 to over 779,000 in 2020. The population is projected to reach 789,000 by 2025.

"The H-2A visa program is offering a whole new dynamic that we'd not really thought about until the last three years," states Dawn Mandt, RRRC executive director. "These folks won't show up in the census data, but we're close to a thousand H-2A visa workers this year. That's the size of one of our communities that we've added."

Rotvold describes how much of the region's rural housing is aging, as are multi-family housing units. Rental rates are generally affordable, but there's a reason.

"Rents have been kept low because the housing stock is old,"



Lisa Rotvold is executive director of the Red River Community Housing Development Organization.

Rotvold asserts. "People talk about small towns being affordable, but if there was something new built, rents wouldn't be quite as low, but those new units would be modern, highly energy efficient, wired for all the current technology and all the things that you can find in the population centers. Everything that was built in 1960 doesn't have that, so you're basically paying 1960s' rents on 1960s' properties."

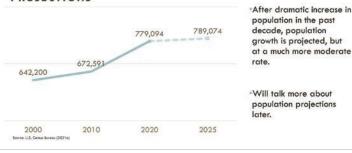
Vacancy rates for rental housing in Region 4 are consistently below 3%, and in some counties in the region, it's closer to 2%. Rotvold says that a healthy vacancy rate is 5%.

Communities close to larger population centers, such as Grand Forks, have a bit more active housing market, but new home and rental unit construction isn't happening in many rural communities.

"Once you get out into some of the smaller towns, we're seeing very few building permits," Rotvold explains. "Some counties may have two per year."

—Story continued on page 31

# STATE POPULATION, 2000-2010 AND 2025 **PROJECTIONS**



Will talk more about population projections

# 2025 HOUSING PROJECTIONS





# ALWAYS LEAVE IT BETTER THAN YOU FOUND T

Through the soy checkoff, U.S. soybean farmers are investing in new production practices to continuously improve their sustainability while protecting the air, water and soil for generations to come.

united**soy**bean.org







© @UnitedSoybeanBoard



**@UnitedSoy**bean



—Story continued from page 28

Statewide Needs Assessment Nancy Hodur, Ph.D., with the North Dakota State University (NDSU) Center for Social Research, and several colleagues conducted the statewide housing-needs assessment prior to the 2022 legislative session. The far-reaching study delivered data and information about recent trends and current conditions for a wide range of demographic, socioeconomic and housing indicators. Dean Bangsund, an NDSU research scientist in the Department of Agribusiness and Applied Economics, was the co-principal investigator.

"On balance, the state is not overly under-housed, but we are woefully short of the housing that the constituents in the state want," Bangsund says. "I think the biggest challenge that the rural areas face is that their housing stock is getting older and older."

Bangsund maintains that issues with housing in the rural areas also tie into recruiting and workforce shortages. He describes how the issues are interrelated.

"If you are trying to attract workers into these smaller communities, you have to have a reasonable option for them to find housing that's somewhat comparable to what they're leaving," Bangsund states.

"Because we're short workforce, if we want to see an expansion of a local economy, it's likely going to result in the need to bring individuals in. What were those individuals living in before they

came to these communities?"

When large employers come into an area, the increased demand for housing is clear. Contractors, homebuilders and investors are more likely to seize the opportunity to build. Because agriculture is a largely mature industry with growth and job creation frequently on a smaller scale, housing needs may be more location specific.

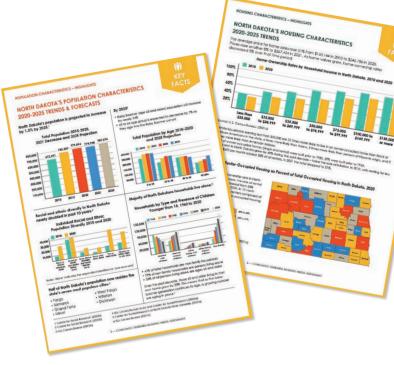
Housing needs also vary depending upon the nature of the employment and the employees' necessities. Adding workers for a livestock operation where there may be a high employee turnover rate favors more rental units while other types of agricultural development may warrant more permanent housing.

"I think we're up against the issue where we have to respond after the demand is there," Bangsund contends. "We can't pre-supply the housing. We need to find solutions to the housing once the demand is there."

### **No Simple Solutions**

Bangsund explains that, in the case of the shale-oil boom in western North Dakota, some companies built and provided housing for their workers. However, in many cases, businesses that are coming to a community or are expanding, don't want to get into the housing business. Still, available housing is a factor for business growth.

"How do we attract economic development when we're trying to entice a firm to put in investment, when some of the key amenities



that are probably not an issue elsewhere become an issue in North Dakota," Bangsund asks. "If we want to get these folks in here, we need to be working towards alleviating some of these problems. You can't expect to attract a major employer in an area if you're not discussing housing because not all of your workers are going to be people who are already living in the area."

In most cases, experts believe that the solution to the state's rural housing issue will require a regional approach, rather than focusing on an individual community's needs.

The Region 4 housing-needs assessment included some strategies that could be used to help alleviate housing issues, including working with communities to catalyze new construction opportunities; developing a better understanding of workforce needs; considering innovative housing options, such as cooperative housing or modular development; and exploring strategies for redevelopment or reuse.

Funding is always a consideration. Rotvold asserts that there are tools available to help support the creation of rural housing.

"The Housing Incentive Fund has been a very useful tool in rural places," Rotvold contends. "It's a lot more flexible than federal money. Another idea was to create (a) regional fund that would support development in small towns. It could be for construction financing. It could be for down payment, whatever the local folks want to focus on, but we can't subsidize our way out of this problem. We need to find ways to jumpstart activity and then let the private sector take it and run with it."

"There are so many nuances to this conversation, so digging into it requires some deeper thinking," Mandt says.

The Center for Social Research is in the process of updating the Housing Needs Assessment. Findings from that study will be available later this fall.

—Story by Daniel Lemke

### CHANGE IN HOUSING TENURE IN NORTH DAKOTA



With a decrease in homeownership, there is an increase in renteroccupied housing.

The percent of renter occupied housing has increased by 5% since 2010.

# **Getting to Know the United Soybean Board Director**



Cindy Pulskamp Hillsboro, North Dakota

### Tell us about your farm.

I farm with my husband, Neal Pulskamp, in Hillsboro, North Dakota. We farm soybeans, wheat and sugarbeets.

# What do you like best about farming?

The flexibility and sense of accomplishment. No two days are the same.

### Did you always know that farming was something you wanted to do?

I had the opportunity to join my husband's farm over 20 years ago. Having held positions in agribusiness, it was a seamless transition to become part of the farm. I haven't looked back since.

# Why did you get involved with the United Soybean Board?

The United Soybean Board gives me a chance to help guide the future of soybeans in the United States through the avenues of research and education. Soybeans are such a diverse product, and working to continue to guide the future potential of this product and open new doors of where soybeans can be the solution only increases

the value of soy, both to the user and the grower.

# Why are soybeans part of your crop mix?

Soybeans are a perfect fit for the crop rotation on our farm. The uses for soybeans are very versatile. From food, oil, animal feed and biofuel, the options are endless for the use of soybeans, depending on the type planted. This gives growers the choice of crop to grow and many markets to sell their beans into.

# What has changed most about farming since you've been involved?

Technology in the industry as a whole. GPS, seed genetics, precision ag along with size and power of equipment have all changed extensively over the years.

# What changes do you expect to see on your farm in the next 5 to 10 years?

More automation, continue to advance opportunities in precision farming, drone spray systems for crop scouting and weed control. With less available labor, searching for more ways to increase efficiency in farming practices.

# What do you like to do outside farming?

Traveling and sharing my expe-

riences in agriculture. Learn about other areas of the world and the people that live there.

# If you could go anywhere, where would it be?

The future. The possibilities are endless and truly unimaginable of what agriculture will look like in the next 20-50 years. History has shown that we are limited only by our own imagination and need. We all hear reference to the world population growing and how will we feed that number in the future. The American farmer has shown that they are able to meet the challenge of better farming and ranching with the same land. Hard work and ingenuity is what has driven that forward in the past, and it would be exciting to see the accomplishments many years from now.

# What's the one piece of farm equipment or technology you wouldn't want to be without?

Global Positioning System. The ability to increase accuracy and efficiency with the systems while lessening the stress of long hours on intense equipment operation has been one of the most amazing changes I have experienced.

—Story by staff, photo courtesy of the United Soybean Board

Pulskamp is one of four United Soybean Board directors from North Dakota. For more information about the United Soybean Board, visit unitedsoybean.org.

# **Bean Briefs**

# ASA Offers CARB Comments

The California Air Resources Board (CARB) released a second 15-day notice of public availability for comments about proposed changes to the Low Carbon Fuel Standard (LCFS). The American Soybean Association (ASA) and coalition partners met with CARB staff and board members to highlight concerns with the current proposed changes. While some meetings have been productive, the ASA maintains that CARB continues to make policy decisions based on political pressure rather than science.

Of greatest concern to the ASA, CARB's latest proposed changes to the LCFS expand the limitation on crop-based feedstocks by adding sunflower oil in the 20% virgin vegetable oil cap, meaning that the 20% cap will now apply to three feedstocks (soy, canola and sunflower oil) in aggregate, rather

than two, which could further limit soybean-oil participation in the California LCFS market. The new LCFS proposal provides a little more flexibility with the timeline for implementing the virgin vegetable oil cap, stating that all fuel producers with approved pathways will need to reach compliance by

# **Getting to Know the Expert**



Lacey Quail, Ph.D.
North Dakota State University (NDSU) Extension Livestock
Management Specialist
North Central Research Extension Center (REC), Minot

### Where did you grow up?

I grew up on a farm near White, South Dakota, raising sheep and cattle.

# Please tell us about your education.

I attended South Dakota State University after high school and finished a bachelor's degree in animal science in 2016. While there, I worked with the beef Extension specialist on some undergraduate research. I found I was really interested in applied beef cattle research, so I then pursued a master's degree in reproductive physiology at Texas A&M University, where I graduated in 2018. For the next year and a half, I managed the Sheep Teaching and Research Center at Michigan State University before I decided to pursue a Ph.D. I graduated with my Ph.D., in reproductive physiology, from Texas A&M University in 2024.

# What interested you about working with livestock?

Raising livestock has been a part of my family for generations, so seeing my family involved is what first got me interested. As a kid, I always loved being outside, and I remember really enjoying taking care of something, like raising bottle lambs or calves. As I got older, I really appreciated how working with livestock always gave you something to learn more about or a skill to improve upon: from learning how to put up hay, to building or fixing, to planning breeding seasons, the list goes on and on. Working with livestock really requires you to be well-rounded, and I enjoyed constantly learning while still getting to care for animals.

# What interested you about the position at NDSU?

This position interested me because it was an opportunity to help contribute to a group where every member is working together towards a common goal: to improve livestock production by listening to and being a resource for producers as we apply what we learn from research to farms and ranches.

# What does your role at the REC involve?

I work with others in Extension. livestock organizations and stakeholders to coordinate and deliver livestock management programs across North Dakota to Extension agents and livestock producers. That may include writing news releases that focus on pertinent research or topics in the livestock industry, hosting day programs to learn more about topics like ration balancing or calving/dystocia, or fielding questions and developing resources for something such as body condition scoring or breeding management.

# What most excites you about the NDSU position?

Meeting livestock producers, learning about their operation and its history, and then hearing about their goals moving forward is most exciting for me in this position. If I can be a resource to help along the way, that's even better.

# What interests do you have outside work?

I enjoy gardening, cooking/ baking, running, driving my antique pickup, and visiting family and friends.

> —Story by Daniel Lemke, photo proviuded by NDSU

Jan. 1, 2028, as opposed to just the producers that are currently over the cap. Importantly, soy-based biofuels will still be allowed in California but would not generate credits beyond the cap.

Another area of potential concern for the ASA is that CARB has proposed adjusting

the timeline used to determine when its Automatic Acceleration Mechanism (AAM) can trigger. The AAM allows for an additional decrease to the carbon intensity (CI) score requirements for credit generation when certain CI benchmarks are achieved and maintained during a calendar year.

Significant AAM ramp-ups could push soy biomass-based biodiesel (BBD) out as an LCFS credit generator sooner. The proposal allows CARB to trigger the AAM based on data from the previous four quarters of reporting, rather than the previous calendar year. Quarterly analysis could offer

additional opportunities to ramp up the CI reduction benchmarks.

The ASA will continue meeting with CARB staff and board members to share concerns related to all the proposed updates that affect soybean growers.

—Story continued on page 34

—Story continued from page 33

# Mitigation Requirements for Chlorpyrifos

The Environmental Protection Agency (EPA) announced additional mitigation requirements for chlorpyrifos to protect federally threatened or endangered species. The measures include new product labels containing additional protections and bulletins that set geographically specific limitations on pesticide use.

The mitigations also include restrictions about when to apply and for tank mixing, use limitations related to both runoff and drift, and wind-speed restrictions.

The registration review process for chlorpyrifos is ongoing. In early 2025, the EPA plans to issue an amended Proposed Interim Decision for chlorpyrifos to obtain public comment, followed by an Interim Decision in late 2025.

# ASA Supports Renewable Fuels Legislation

The American Soybean Association (ASA) and the National Oilseed Processors Association hailed the introduction of bipartisan, bicameral legislation to support renewable fuels that are produced from domestically sourced feedstocks.

The Farmer First Fuel Incentives Act, introduced by Sens. Sherrod Brown, D-Ohio, and Roger Marshall, R-Kansas, and Reps.
Tracey Mann, R-Kansas, and Marcy Kaptur, D-Ohio, would restrict eligibility for the Section 45Z Clean Fuel Production Tax Credit to fuels produced from domestic feedstocks and would make 45Z a 10-year credit by extending it to 2034.

"Biofuel production paves a key path for our country to be a clean energy leader, and U.S. farmers who grow the crops going into those biofuels take pride in helping reduce greenhouse-gas emissions while supporting the U.S. economy and energy independence," said ASA President Josh Gackle, a North Dakota soybean farmer. "However, for continued growth of America's promising biofuels industry, U.S. farmers need the support of a final 45Z rule that prioritizes domestically sourced feedstock.

This legislation's introduction follows a recent surge of imported waste feedstocks, such as used cooking oil, beef tallow and yellow grease, that generate higher credits than U.S. soybean oil with the carbon intensity-based biofuel programs. Imported waste feedstocks are assigned lower carbon intensity scores and benefit from minimal oversight and testing. Without this legislation, biofuel producers will have added incentive to buy imported feedstocks instead of U.S. soybean oil when the 45Z tax credit goes into effect on Jan. 1, 2025.

# Pressing for Passage of the GSP Program

The American Soybean Association (ASA) and fellow U.S. ag and food organizations sent a letter to key congressional leaders urging the swift reauthorization of the Generalized System of Preferences (GSP) program. With the program having expired Dec. 31, 2020, delays with reauthorization threaten to disrupt critical market-access opportunities for U.S. agriculture and related industries.

The GSP program, established by the Trade Act of 1974, allows over 119 countries and territories to export certain products duty-free to the U.S. This framework not only promotes economic growth and stability for developing nations, but also supports American jobs, contributing approximately \$1.53 trillion to the U.S. gross domestic product (GDP) in 2023 and sustaining

over 22 million jobs.

Without GSP, developing countries may turn to less-scrupulous trading partners, which could jeopardize long-term relationships and increase the economic vulnerabilities. Additionally, the GSP serves as an essential tool for American farmers and ranchers, providing opportunities to diversify export markets and to compete effectively on a global scale.

The ag groups also emphasized that GSP participation should come with strict criteria to ensure fair trade practices. Key conditions include maintaining reasonable market access for U.S. agricultural goods, upholding science-based import requirements and avoiding excessive domestic subsidies that could hinder U.S. competitiveness.

American farmers rely on foreign-market access to thrive, and the expiration of vital trade programs such as the GSP undermines the United States' credibility as a trusted trade partner.

### Concern About 2,4-D

The American Soybean Association (ASA) and the National Corn Growers Association (NCGA) expressed frustration with a recently released recommendation by the U.S. Department of Commerce to impose preliminary countervailing duty rates on imports of the herbicide 2,4-D.

The decision comes at the behest of domestic herbicide producer Corteva Agriscience, which filed a petition earlier this year calling for antidumping and countervailing duties on imports of the herbicide 2,4-D from certain foreign suppliers. Farmers have said that their demand exceeds the product's domestic supply, and foreign sources help fill this gap.

"Access to this herbicide is critical for corn growers. Because there is only one domestic supplier manufacturing 2,4-D, growers in the U.S. must look to foreign suppliers to help meet our needs," said Minnesota farmer and past NCGA President Harold Wolle. "We would welcome ideas from Corteva on how to ensure that this herbicide is available and affordable for American growers."

Other grower leaders also spoke out about the recommended duty rates.

"This decision to raise duties on imports is disappointing for soybean growers nationwide," stated Josh Gackle, the ASA president and a North Dakota farmer. "We rely on imported generic 2,4-D, in combination with other herbicides, to manage weeds efficiently before planting. The increased costs could strain our operations during an already difficult time."

The proposed duties would place a substantial tariff on herbicide imports, which has the potential to affect availability throughout rural America.

Gackle added, "This is just the beginning of a lengthy process. ASA remains committed to advocating for soybean farmers by engaging with Congress, Commerce and the ITC (International Trade Commission). We will continue fighting against these duties and work toward a resolution that supports U.S. farmers and their bottom lines as the antidumping and countervailing investigations continue."

Commerce's announcement followed the International Trade Commission's vote to move forward with the investigation earlier this year. Commerce is expected to announce the final duty rates at some point next year. The ITC, which has the power to dismiss this case in its entirety, will fully hear the case and make a final determination in 2025.

—Story by Daniel Lemke

# GET \$12 FOR EVERY \$1 INVESTED.

How's that for return value? As the growing season comes to an end, your yield and return on investment are top of mind. While you focus on maintaining machinery, wrapping up farm projects and planning for the next planting season, just know we're working to grow industry demand — which means more money back in your pocket. And it's all thanks to your soy checkoff investment dollars.

# **CHECKOFF INVESTMENTS HELP:**

- · Develop new soy-based products
- · Drive animal agriculture
- Expand export markets

- Support farmers in their sustainable practices
- And more

To see all the ways your soy checkoff contributions help drive the soybean industry and create more demand, visit **NDSoybean.org** 





# NORTH DAKOTA SOYBEAN **GROWERS ASSOCIATION**

4852 Rocking Horse Circle South PRINTED WITH SOY INK

Fargo, ND 58104 (701) 566-9300



# **Save The Date!**







Tuesday, February 4, 2025

# Plan to attend. Plan to learn.

For more information, please visit bit.ly/NorthernCornSoyExpo





Valley Fairgrounds • West Fargo, ND