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On the cover

As we step into 2026, one thing is clear: change is constant. Global trade continues to shift, and the soybean industry keeps evolving with it.

North Dakota farmers have always found a way through uncertain times, turning challenges into opportunities. Today, innovation is part of that tradition. From AI-powered sensors to autonomous equipment, farmers are using technology to make smarter decisions, manage data, and increase efficiency across every acre. That same determination, paired with innovation, will carry us forward once again.



—Photo courtesy of the United Soybean Board, featuring USB Treasurer Matt Gast, a Barnes County farmer, and stock

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he effect of the summertime storms that damaged or destroyed storage capacity at grain elevators and on farms across North Dakota is still being felt months later.

In June, tornadoes and derecho winds damaged or destroyed an estimated 50 million to 80 million bushels of storage. A program called the Grain Storage and Facility Rebuilder Program, through the Bank of North Dakota, was unveiled in response to the damage. In September, the North Dakota Industrial Commission expanded the program to include farmers who were affected by damage from August storms.

The Grain Storage and Facility Rebuilder Program helps agricultural producers replace infrastructure, such as grain storage, livestock barns, machine shops, storage sheds and irrigation pivots. A total of \$37 million is available, which may be used according to state law when the governor declares a disaster in the state.

There are two categories of

support for the Grain Storage and Facility Rebuilder Program. The first one is the Ag Facility Repair and Replacement. Financing is available to repair or to reconstruct grain storage systems and other critical agricultural structures.

"The concept behind this is we're trying to get your storage back to status quo," says Eric Watne with the Bank of North Dakota. "If you are a North Dakota producer that had damage to your facilities, storage, things like that, this program is there to help rebuild it, to get you back to the same spot."

Watne describes how the program is short term and is offered at a 2% interest rate to help farmers get through the harvest before finding a long-term solution.

"This program helps fill that gap at a low interest rate, so it's not hitting the working capital or the operating lines of the producer," Watne states.

The Bank of North Dakota also offers temporary storage support for producers who need temporary options because of lost storage on

their own farms or at their local elevator.

"Most of the time, this is going to be bagging systems, baggers, unloaders and things like that," Watne explains.

Applications for funding through the Grain Storage and Facility Rebuilder Program will be accepted until the end of December. Farmers should work with their local lender to access funds through the Bank of North Dakota program.

The USDA's Facility Loan Program

The U.S. Department of Agriculture's (USDA) Farm Service Agency (FSA) has offered a facility loan program since 2000. This program allows farmers to build grain storage bins, and it supports the necessary handling and drying equipment.

FSA Program Director Brian Haugen says that the loan program does include equipment such as grain baggers.

"That is a temporary solution that this program would cover,"

Haugen asserts.

Haugen clarifies that the facility loan program is continuous, so there's no application deadline. However, farmers should first contact their county FSA office.

The FSA's facility loan program also allows for renovations to existing storage. Haugen states that farmers may have bins they haven't used in a while because the structures are outdated or need upgrades. This program can help farmers renovate those facilities, which could be essential when storage is likely to come at a premium.

"If a producer has an existing bin that the floor needs to be replaced, or there are rings on the bin or panels missing from the roof, if that existing bin needs to be renovated to make it capable to protect the stored commodity, the facility loan could assist there as well," Haugen asserts.

For more information about the FSA's facility loan program, contact your county FSA office.

—Story and photo by Daniel Lemke

2025: The Year of Weathering the Storm

s the year comes to a close, many of us take time to review the harvest, adding up scale tickets and reflecting on the yields we achieved. We think about the decisions we made and how they affected our outcomes, knowing that many of the factors influencing our crops are beyond our control.

This year, outside forces seemed relentless. Harvest, normally a rewarding time, felt different in 2025. Many farmers and those working in agriculture have found it hard to see the rewards of their efforts. The trade war with China and the resulting tariffs closed the door on a key export market for most of the year, causing uncertainty and deepening the financial challenges that were already present.

Thankfully, at least on the trade front, there is cause for cautious optimism. News reports indicate that China plans to purchase about 12 million metric tons of U.S. soybeans this marketing year and roughly 25 million tons annually over the next three years, which is close to the levels of sales seen in recent years. Still, it remains to be seen if these sales will materialize and shipments actually occur as anticipated. The long-term impact of this latest trade war will not be known for some time, especially as South American soybean production continues to increase despite lower global prices. What is clear is that the short-term effects are still being felt nationwide and especially here in North Dakota.

A large portion of our soybeans typically move through the Pacific Northwest to China and other Southeast Asian destinations. When that export market closed its doors for most of the marketing year, soybean flows backed up. Coupled with already low grain prices from abundant global supplies and local elevator basis levels that quickly adjusted to reflect reduced demand, the challenges piled up. Summer storms damaged crops, grain bins, and elevators, adding to the strain.

Rising input costs and an early September frost that reduced yields across much of the state have created real financial pressure for producers heading into 2026.

These circumstances have fueled uncertainty and stress across North Dakota agriculture, especially as many of us meet with lenders this winter to review and assess operating loan capacity for 2026. Anxiety is high because financial concerns are hitting farm country harder than they have in decades. In times like these, encouragement matters. I urge you not to give up. Talk with family and friends, lean on them for support, or simply use them as a sounding board. If you have a mentor or partner who can provide guidance, reach out. Young farmers can learn from neighbors with a lifetime of experience, while seasoned farmers can share perspectives that helps everyone weather the storm.

Although we each run our own operations, we face these challenges together. Do not feel you must

PRESIDENT'S LETTER



Justin Sherlock
President, NDSGA
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navigate them alone. Resources are available across North Dakota to help farmers manage stress and anxiety so we can focus again on the rewards of our labor. Generations before us have endured difficult times, and we will too.

2025 has been a year of challenges, but together, with the support of our community, the promise of renewed trade opportunities, and growing biofuel demand, we can navigate uncertainty and look ahead with hope.

Soy Growers Cautiously Optimistic About China Trade

fter months of stalled purchases and uncertainty, an announcement that China has agreed to purchase U.S. soybeans is encouraging news for



Josh Gackle, Kulm, North Dakota, is the American Soybean Association Chair.

farmers. Growers are hopeful that this renewed commitment from China will help restore opportunities for North Dakota farmers to compete globally.

The details are still emerging, but Treasury Secretary Scott Bessent said that the agreement with China includes a minimum purchase commitment of 12 million metric tons of U.S. soybeans for the remainder of the 2025-2026 marketing year and a minimum of 25 million metric tons annually through 2028. China has purchased 25 to 30 million metric tons of U.S. soybeans in recent years. In 2024, North Dakota produced 6.69 million metric tons of soybeans, with the

majority of those soybeans and soybean products being exported via the Pacific Northwest.

"That's really not growth from where China has been in the past, but it certainly is a step in the right direction from where they've been currently with zero purchases," says Josh Gackle, American Soybean Association chair and a Kulm farmer. "I think you see the results of the work that the association's put in and farmers themselves and board members advocating and making sure that soybean and other purchases were part of the discussion."

While this development is a positive step, the North Dakota Soybean Growers Association remains cautiously optimistic. It will take time to see how these commitments translate into actual sales, particularly through the Pacific Northwest export corridor, which is critical for North Dakota soybean farmers. Many farmers continue to face negative margins and financial pressures, so meaningful improvements will depend on consistent, long-term follow-through in the marketplace.

"Even with our expanded processing here in North Dakota, that export market continues to be a big part of our value chain," Gackle adds.

> —Story by Daniel Lemke, photo courtesy of ASA



fter years of teaching while operating a family farming operation, Todd Stutrud of Barton left teaching in 2000 to focus on running the family farm. Stutrud was a vocational agriculture teacher and FFA adviser in Willow City.

The combination of teaching, farming and attending numerous FFA events meant that Stutrud had little time or interest to become involved with farm organizations.

"I was teaching and farming. I didn't have time to get involved in any other organizations," Stutrud recalls. "When I first quit teaching, I'll be honest, I didn't want to be on any board or organization. I was on the church council, but I was burned out from going all the time. Being a teacher, you attend all the FFA events, going to the state and national conventions and other activities."

Stutrud, a fifth-generation farmer from Pierce County, focused on the family operation he runs with his wife and son, raising soybeans, malt barley, hard red spring wheat and canola.

Several years ago, Stutrud was interested in attending the Commodity Classic. Because American Soybean Association (ASA) members received some discounts for the Commodity Classic, Stutrud signed up as a North Dakota Soybean Growers Association (NDS-GA) member, which includes an ASA membership.

"It was a no brainer that, if you joined the Soybean Growers, the membership more than paid for itself if you were going to go to Commodity Classic," Stutrud said.

Stutrud attended several Commodity Classics with his son, Joshua Stutrud, right after Joshua graduated from college. The annual event features the national meetings for the ASA, the National Corn Growers Association and the National Association of Wheat Growers. The Commodity Classic also includes learning sessions, speakers and a sizable trade show.

"I really enjoyed them and got a lot out of them," Stutrud recalled.



Todd Stutrud left teaching more than two decades ago to farm fulltime.

In 2018, Joshua Stutrud became the North Dakota Corteva AgriScience American Soybean Association Young Leader. He later became an NDSGA director.

"From his time on the board and just listening and talking with the board members, it really got me more interested in being part of the NDSGA if the opportunity presents itself," Todd Stutrud explained.

The opportunity arose when Joshua Stutrud termed off the NDSGA board.

Todd Stutrud was approached about filling the at-large seat.

"The board contacted me, interviewed me and asked if I was interested," Todd Stutrud stated, "and I was very interested in serving."

As an experienced farmer, Todd Stutrud described how there are plenty of issues that have his attention, but one current concern was at the top.

"The first answer is trade," Todd Stutrud asserted. "We definitely need trade to work, and we need deals."

Soybean exports were limited this fall due to the trade tensions

with China. In-state soybean crushing helps cushion the blow of sharply reduced export markets, but exports still play an outsized role in soybean profitability.

Todd Stutrud reveals that increased domestic utilization through new uses and expanded biofuel development is also an area of interest.

"It's very important that we work on demand," Todd Stutrud says. "Biofuel standards for biodiesel and renewable diesel create domestic demand that will help us long term because, then, we don't have to depend on somebody else. That's a big one for me."

Todd Stutrud points to other concerns, including how U.S. Fish and Wildlife Service wetland easements are handled.

Many aspects of agriculture are affected by policy, so getting a functional, five-year farm bill is also an important issue. Because there can be wide disparities with how commodities are treated by farm bills or federal disaster policies, Todd Stutrud recognizes the need for farmers to be involved with advocating for their own industry.



Todd Stutrud is stepping into the same North Dakota Soybean Growers Association seat that his son filled until he termed off earlier this year.

"It's my opinion that whoever advocates better for themselves helps themselves," Todd Stutrud asserts.

"Having the right people at the table makes all the difference in the world."

While advocating for North Dakota farmers is part of the territory for NDSGA farmer leaders, Todd Stutrud also sees a need to make sure that the farmers understand how a policy decision affects them and how important it is for growers to help themselves by becoming NDSGA members.

"I think there are a lot of soybean growers who could join the North Dakota Soybean Growers Association that don't," Todd Stutrud contends. "I just think they don't know what the organization does for them and how it benefits them by being a member."

NDSGA membership helps grow the soybean industry and ensures farmers' voices are heard by policymakers at both the state and national level. The organization works on key issues to build a brighter future for rural North Dakota. See page 33 to join and be part of the movement.

—Story and photos by Daniel Lemke



Stutrud says exports and domestic soy utilization are issues of interest to him.

Getting and Providing Perspective

efore I became involved with the North Dakota Sovbean Council (NDSC), like a lot of farmers, I didn't give much thought to where my crops went after I took them to market. I farm and ranch with my husband and daughter by Wilton, raising about 300 head of cattle as well as growing corn, soybeans, sunflowers, wheat, durum, pinto beans and peas. After serving on the NDSC since 2020, I have a whole new perspective about the industry and the farmer leaders who are dedicated to improving it.

I first connected with NDSC when the organization sponsored me to attend the Top Producer Women in Ag Conference several years ago. At the Chicago conference, I met so many people within the soy industry, from the United

Soybean Board and the American Soybean Association to the NDSC, that I wanted to get involved and to find out more about what was being done to promote what I produced.

I was elected to the NDSC board, becoming the first female director in North Dakota. As a rancher and a woman, I've been able to offer my perspective for the decisions the board makes. Even though I'm the only woman on the board, the other members have always treated me like the farmer that I am. They recognize me for the voice that I offer and value the input I bring to our discussions.

As much as I've enjoyed my service, I will term off the NDSC board on June 30, 2026. In December, NDSC's election process for district and county representatives begins. This is an opportunity for farmers across

North Dakota to consider offering their perspective to the NDSC. It doesn't matter if you're a man or a woman, if you have a large farm or a small one, your perspective could be just what's needed.

NDSC makes a lot of decisions regarding investments in research, market development and education. That task is where diverse perspectives and experiences are so valuable in helping to make decisions.

Being involved with NDSC has been a great undertaking for me. I went into my time on the board not knowing what to expect, and I left with a higher understanding of what it's like to be on such an incredibly organized board. The people involved with NDSC are very passionate about what they are trying to do. They are 100% invested in supporting North Dakota's soybeans



Jennifer Meyer Wilton, North Dakota Email: jmeyer@ndsoybean.org

and soybean farmers.

As with any board or leadership program, there is a commitment. The time spent on NDSC is incredibly worthwhile. You're providing a service for the future of soybeans in North Dakota. You're working on research. You're addressing market development issues. Someone has to be a voice for North Dakota farmers. If you're interested in being that person, by all means, get involved.

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- Understanding and harnessing soil biology
- Economics of soil management practices
- Integrating crop and livestock systems
- And more!

z.umn.edu/SMS-DIRT 🏀







Make a Difference: Serve as an NDSC County Representative



he North Dakota Soybean Council's (NDSC) 2026 election process will begin in December 2025 for the following counties::

- District 2: Ransom and Sargent Counties
- District 8: Nelson, Griggs and Steele Counties
- District 10: Cavalier, Pembina and Walsh Counties
- District 12: McKenzie, Dunn, Billings, Golden Valley, Slope, Bowman, Stark, Hettinger, Adams, Mercer, Oliver, Morton, Grant, Sioux, McLean, Burleigh, Kidder, Logan, Sheridan, Emmons and

McIntosh Counties

How Does the NDSC Election Process Work?

Elections are conducted by mail. Soybean farmers in these counties will receive nomination instructions in a green envelope in December 2025.

In February 2026, 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's soybean farmers.

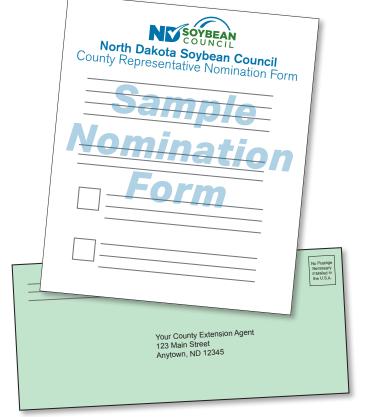
In single-county districts, the

elected producer will serve on the NDSC's 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.

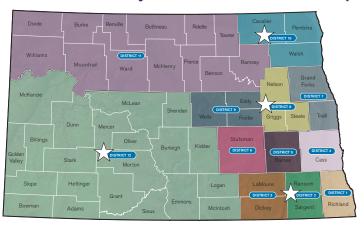
If you're a soybean producer in one of these counties, consider nominating a peer or even yourself for the role of county representative!

To learn more about the NDSC's election process, scan the QR code.





North Dakota Soybean Council District Map











Tuesday, February 3, 2026 • Butler Machinery Arena • Red River Valley Fairgrounds • West Fargo

Tentative Agenda

7:30 a.m. | Butler Arena

Registration, Light Breakfast, and Visit the Research Pavilion and Trade Show

8:15 a.m.

Welcome

Emcee Clinton Griffiths, Farm Journal

Early Riser Sessions

Weather with Daryl Ritchison, ND Agricultural Weather Network (NDAWN) BNSF Ag Update: Crop Year and Rail Update with Rachel Lemieux, BNSF Railway

9:15 a.m.

ND Soybean Growers Association & ND Corn **Growers Association Annual Meetings**

10:30 a.m.

Market Outlook & Economy

Ben Brown, University of Missouri's Food & Agriculture Policy Research Institute

11:30 a.m. | Hartl Building

Lunch, and Visit the Research Pavilion and Trade Show

Butler Arena

Red River Valley Fairgrounds West Fargo, North Dakota



12:30 p.m.

National Industry Panel

Steve Censky of the American Soybean Association, Lucas Lentsch of the United Soybean Board, a representative from the National Corn Growers Association, and Ellen Zimmerman of the U.S. Grains & BioProducts Council will share key updates on markets, policy, and opportunities for growers.

1:30 p.m. | Break

Visit the Research Pavilion and Trade Show

1:45 p.m. | Butler Arena

Practical Strategy, Hard Decisions and Farmer of the Future

Retired U.S. Army Colonel and former West Point instructor Ken Gilliam of The Directions Group shares practical frameworks to help guide tough decisions and prepare farms for the future.

2:45 p.m.

Reception Kickoff: ND Soybean & Corn Leaders

Hear from ND corn and soybean leaders representing both the checkoff and association boards during a reception kickoff discussion.

3:00 p.m.

Industry & Partners Reception

Hear from Jim Thompson of the ND Soybean Council, Justin Sherlock of the ND Soybean Growers Association, Carson Klosterman of the ND Corn Council, and Andrew Mauch of the ND Corn Growers Association during a kickoff reception discussion. What keeps these leaders up at night? Get a quick round-robin update on the work of their farmer-led organizations.

4:30 p.m.

End of the 2026 Northern Corn and Soybean Expo: See you on February 9, 2027!

For more information visit bit.ly/NorthernCornSoyExpo Online registration opens December 3, 2025.



CHRISTMAS

he holidays are a time for giving, gathering and gratitude. This year, consider wrapping up gifts made with soy. From cozy candles to high-tech tires, soybeans are making their mark far beyond the dinner table. Choosing soy-based products also supports local farmers.

Whether you are shopping for the practical person, the little artist, or the stylish friend, soy-based gifts combine quality, comfort and fun for the perfect holiday surprise.

Soy Candles

These candles burn cleanly and last long, making them a warm, inviting gift for friends and family. You can also find North Dakota soy candle makers through Pride of Dakota at prideofdakota.nd.gov.



Firefighting SoyFoam™

One standout gift this season is firefighting SoyFoam. SoyFoam is a biodegradable, PFAS and fluorine-free fire suppressant that can be easily used in combines, trucks, or tractor cabs. It comes in convenient sizes from 8 oz. bottles to 55-gallon drums. Simply add an 8 oz. bottle to a standard 2.5-gallon pump sprayer or pressurized water fire extinguisher, and you are ready to fight fires safely and effectively. SoyFoam is the only GreenScreen Certified GOLD firefighting foam in the world.



Take the power of SoyFoam with you wherever you go in your combine, truck, or tractor cab. Learn more at crossplainssolutions.com.

Babysoy Stay-On Socks

Keep tiny toes warm and steady with Babysoy Stay-On Socks with Grips. The soft fabric keeps babies comfortable while the grips help prevent slips on hard floors. Order at babysoyusa.com.



Soy Tires

Winter roads can be tricky, but tires made with soybean oil stay flexible in freezing temperatures, providing better grip and safer handling on icy streets. Find them at goodyear.com by searching "soy tires."







bar and chain oil keeps equipment running smoothly while providing excellent performance. Trusted brands such as DeWalt and DPG offer options that get the job done. Discover more at soybiobased.org/products. **Okabashi Soy Sandals**

These comfortable sandals are made to last, and they maintain color and shape, making them a great gift for any casual outing. Shop at okabashi.com.



Make Your List a Little More Fun

Skechers with Soy Rubber Soles

soy-based rubber soles offer great comfort

searching "Goodyear."

Crayon Rocks

and traction. Find them at skechers.com by

These crayons, made from soft soy wax

From workouts to errands, these shoes with

Before sending your wish list to Santa this year, consider adding a few soy-based surprises. They are practical, fun and perfect to make the holidays a little brighter for everyone on your list. Even better, every gift made with soy helps support farmers and the communities they call home.

Learn more about soy innovations while shopping for soy-based products at soynewuses.org.

—Story by staff, photos courtesy of the United Soybean Board and staff







An Ever-Changing Pest

oybean cyst nematode (SCN) has already established itself as the nation's most damaging soybean pathogen. It also continues to spread and evolve, making it an even bigger headache for the state's farmers.

Research shows that SCN populations evolve, adapting to the management practices used to control them. An earlier study at North Dakota State University (NDSU) looked at the status of SCN virulence in North Dakota. Between 2015 and 2017, SCN populations from 73 field samples were categorized into 6 Heterodera glycines (HG) types; HG type 0, at 36%, was the most commonly found, followed by HG type 7 (27%) and HG type 2.5.7 (19%).

The most recent survey of 21 field samples, collected in 2024, detected 8 HG types. The dominant population has shifted because HG type 2.5.7 now accounts for 57.1% of samples while HG 7 and HG 0 each account for only 9.5%.

The HG-type system describes the resistance sources on which SCN populations can reproduce. An HG type of 0 indicates that the SCN population can be controlled effectively with all sources of resistance. If the number 1 is present in the HG type, it indicates that the SCN population can overcome Peking-type resistance while a 2 indicates reduced effectiveness of PI 88788 genetic resistance. The detection of HG types containing a 1 or a 2 is an early warning sign that these historically reliable resistance sources may no longer provide adequate SCN control.

The 2024 test results confirm a shift in SCN virulence phenotypes in North Dakota.

For decades, PI 88788 has been the backbone of SCN resistance for commercial soybean varieties across the U.S. North Dakota State University (NDSU) researchers say that widespread and repeated use of this single resistance source has selected for SCN populations capable of overcoming it. The increased HG type 2.5.7, known for its ability to attack PI 88788, indicates that the effectiveness of this resistance source is decreasing in North Dakota fields.

"This doesn't mean PI 88788 resistance is completely failing, but farmers need to be aware that the SCN population is changing and evolving," states Guiping Yan,

Ph.D., NDSU nematologist.

Without more proactive management, farmers may see reduced yield protection from resistant varieties that have widely been used.

The evolving pest points to the need for farmers to be proactive when addressing SCN. Farmers are encouraged to get their soil tested to confirm SCN populations and to determine which HG type is present. Farmers should also rotate between different SCN-resistance sources for their soybean seed, particularly PI 88788 and Peking, to help diversify selection pressure on SCN populations.

Within a resistance source, farmers should avoid repeatedly planting the same variety. Rotating different resistant varieties can help delay the resistance breakdown.

"It's good to rotate the soybean varieties because they may combine different genes," Yan contends. "The PI 88788 is not just a single gene; there are multiple genes. If you have a different combination of genes, the level of resistance is also different."

The increasingly virulent SCN populations and wavering effectiveness of the PI 88788 resistance represent another challenge for North Dakota's soybean farmers.

"It's just a major shift in the varieties that have to be grown by these farmers," says NDSU Extension Soybean Pathologist Wade Webster, Ph.D., "that's the major issue. Thankfully, we do have more Peking varieties that are commercially available."

Webster describes how researchers are seeing more soil samples testing positive for SCN, and the samples that are coming in show populations are trending upward. He states that researchers are finding more frequent numbers of high SCN counts. The investigators are also identifying new fields across North Dakota that have SCN populations.

"SCN is not going away," Webster explains. "This is an issue that's continuing to develop and change, and we're going to have more challenges because of this shift in these HG types that Dr. Yan's program has identified."

In addition to using different sources of resistance, farmers can help manage SCN populations with other management strategies, such as crop rotation. Corn and wheat are good rotational options because they do not host SCN.

"Crop rotation is going to be very important as long as farmers rotate out of soybeans and dry beans," Webster asserts. "That rotation can help drive SCN populations down about 50% that first year."

Webster maintains that seed treatments may have some effect on SCN protection, especially during the first two-to-three weeks of the season, potentially slowing down SCN populations. However, seed treatments are not going to be season-long protection, so PI 88788 and Peking remain the best tools that farmers have at their disposal when it comes to genetic resistance.

—Story by Daniel Lemke, photo courtesy of The SCN Coalition





wenty-one U.S. farmers and ranchers, including Valley City soybean farmer Matt Gast, traveled to South Korea on Sept. 7-13 as part of the U.S. Meat Export Federation's (USMEF) Heartland Tour. The goal was to strengthen the demand for U.S. beef and pork.

The mission delegates visited a variety of retailers, including Costco; E-Mart; and Coupang, popularly referred to as the "Amazon of South Korea," focusing on growing protein-based diets in the country. The group held meetings with importers Fresheasy, Frank Burger, and Highland Foods; and administrators at the Port of Busan. Additionally, the farmers spoke with trade officials at the U.S. Embassy in Seoul, discussing sustainability practices, opportunities and issues.

Gast, who serves as the treasurer for the United Soybean Board, states that, although Korea's population is just 51.75 million and roughly the size of the state of Indiana, the country presents a growing opportunity for soybean farmers.

American beef and pork are leading the way.

"In 2024," says Gast, "Korea purchased more U.S. beef than any other export market at \$2.2 billion in sales while U.S. pork exports reached a record \$728 million. And through July 2025, they have purchased about \$1.4 billion in U.S. beef, up nine percent from last year, and \$432 million in U.S. pork."

Korean dynamics are shifting as the demand for protein grows, Gast explains. "Many people I spoke with said they now eat protein at every meal." He learned that the population is eating less rice and more protein.

While beef remains the biggest opportunity for U.S. farmers, soybean meal is another bright prospect. North Dakota's two new crush facilities create the potential to easily crush and ship meal from North Dakota via rail to the Pacific Northwest, where it can then be shipped directly to South Korea, fulfilling Korea's meal needs while providing more opportunity for North Dakota farmers.

While meal sales represent a bright prospect for soybean farmers, Gast contends that the Korean livestock sector does face some limitations. First, mountains and hills make up about 70% of the country, limiting space. The Korean population is so dense that Gast likens it to more than 50 million people living in a corner of Indiana. "They will probably also continue to import our meat simply because they prefer it," he asserts.

Although imported American meat is expensive, Koreans' appetite for it only continues to grow. "They do produce Wagyu there,"

Gast adds, "but the quality is not the same as ours. They also import meat from Australia but still prefer meat from the U.S." Steakhouses serving U.S. beef are also cropping up across South Korea. "We also saw quite a few banners advertising U.S. beef, pork, soy and USMEF," he reports. "These were not placed there because of our visit but were a regular, everyday thing."

In fact, the South Koreans' penchant for U.S. beef and pork is so great that the USMEF established American BBQ week, where U.S. meat products are promoted in restaurants across the country. This year, the USMEF built on the success of previous American

barbecue promotions in Korea, hosting the event in Seoul, Inchon and Busan. Nineteen outlets from 12 American barbecue restaurants participated in three week-long promotions that featured dishes made with U.S. beef and pork. The showcase allowed consumers to enjoy a special barbecue, gourmet experience at a discounted price.

The United Soybean Board (USB) invests checkoff funds in the USMEF, Gast explains, and meat exports also help to drive domestic demand for U.S. Soy in animal diets.

Overall, says Gast, the opportunity to meet with buyers and to emphasize the quality and sustainability of U.S. Soy products is key. "We already know that our Korean customers prefer

U.S. beef and pork, so telling them about how we, as farmers, grow more with less helps to further solidify their preference for our products. Whether we produce beef, pork or soy—and, of course, soy is an important component of these meats—strengthening these relationships is vital."

—Story and photos courtesy of the United Soybean Board



United Soybean Board Directors Matt Gast (right) and Brent Gatton met with retailers Costco; E-Mart; and Coupang, known as the "Amazon of South Korea," to discuss expanding protein-based diets in South Korea.





ith unpredictable weather, long hours and tight margins, farming has always been tough. These days, the weight feels heavier.

Market swings. High input

costs. Changing regulations. They all pile on, and for many farmers, the stress lingers long after the equipment is parked.

"The most important asset on any operation is the health and well-being of the farmer," said Sean Brotherson, North Dakota State University (NDSU) Extension family science specialist. "If feelings of frustration and helplessness build up, they can lead to problems involving family, health and decision making. And if left unresolved, they can have serious consequences."

That truth is tough for producers who were raised to "push through." Brotherson asserted that ignoring stress doesn't make it go away. It just makes the stress harder to manage.

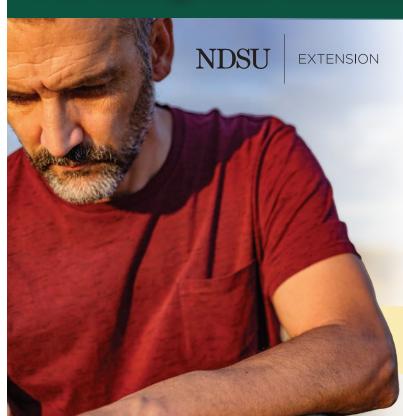
"Farmers are used to fixing problems," Brotherson stated.
"But you can't fix what you won't acknowledge. Stress is one of those things that gets worse when you try to outwork it."

Farming doesn't come with an off switch. Work and home lines often blur. Over time, that constant load can chip away at health, sleep and relationships.

Brotherson compares stress to a warning light on a tractor's dashboard. "It's telling you something needs attention," he explained. "If you ignore it and keep running, eventually something breaks."

Fatigue, irritability, short

Farming and Ranching are Stressful



Concerns about production, prices and policy can weigh heavily on us.

It is okay not to be okay in times of high stress, whether during harvest time or when dealing with an uncertain farm economy.

If you feel isolated or overwhelmed, talk to someone — family, friends or a professional. Reaching out for help isn't weakness; it's a sign of wisdom and strength. Recognize that you're not alone.

Take time to connect with resources that can support you and help you to be resilient in tough times. Find stress management tools made for farmers and ranchers at ndsu.ag/managingstress.

If you or someone you know is struggling or in crisis, help is available. **Call or text 988.**

NDSU is an equal opportunity educator and employer. Visit ndsu.edu/equity or call 701-231-7708 for more information.



tempers and poor focus are all signs that stress is starting to take a toll. "You can't pour from an empty tank," Brotherson added. "At some point, you have to stop and refuel."

You can't change the weather or the market, but Brotherson reminds farmers that they still have power over three key areas: events, attitudes and responses.

Plan Ahead

"Plan ahead when you can," Brotherson declared. "Talk with family or employees before key seasons or big decisions. Decide what's urgent and what can wait."

Reframe the Situation

"How you view a situation determines how it affects you," Brotherson maintained. "Instead of focusing on what went wrong, take stock of what went right." Take a break when stress spikes; step away, even if it's only

for a moment. "Five minutes to breathe or stretch can make a difference," Brotherson said. "You don't need to overhaul your life. Just start small."

Talk About It

Many farmers hesitate to talk about stress because it feels uncomfortable. Worse yet, it feels like failure. Brotherson stated that silence helps no one. "We've built a culture of toughness in agriculture, and that's part of what makes farmers resilient," he asserted. "But strength isn't the same as silence. Reaching out for help takes courage."

Brotherson also encourages producers to check in on one another. "If you notice a neighbor who's withdrawn, irritable or just not themselves, don't let it slide," he suggested. "Ask how they're doing. Sometimes, that simple question can make all the difference."

Connect with Mental Health Resources in North Dakota

The North Dakota Soybean Council (NDSC) works closely with NDSU Extension and other partners to connect farmers with resources that protect well-being in addition to yields. Farmers can turn to trusted, confidential support networks that understand agriculture:

- For NDSU's farm and ranch stress resources, visit ag.ndsu. edu/farmranchstress
- The American Soybean Association (ASA) provides resources for people struggling with stress, depression or thoughts of suicide. The ASA cares and can help you find qualified support: bit.ly/SoyHelpResources
- Together Counseling's Farm to Farm service program is a group of North Dakota counselors, many of whom have ag back-

- grounds. Farm-stress grant funding may cover the costs: togethercounselinggroup.com
- Dial 988 anytime to receive immediate support via the state's Suicide & Crisis Lifeline.
- Dial 211 to connect with local mental health and crisis services via FirstLink.

"If you ever feel like you're reaching a breaking point, don't wait," Brotherson said. "Reach out to a friend, a pastor, a counselor or one of these services. You're not alone."

NDSC encourages farmers to treat their health like any other investment, one that pays dividends across the entire operation.

"Your work feeds the world," Brotherson adds, "but your health sustains it."

—Article courtesy of NDSU Extension

Producer Shop Talks: Real Conversations Right Where You Farm

March 31: Berthold | 8:30 a.m. CT Cody Hansen's Farm • Berthold

April 1: Fort Ransom | 2:30 p.m. CT
Thrill Hills • Fort Ransom

April 8: Harvey | 11:30 a.m. CTPaul Anderson's Farm • Harvey

April 9: Grand Forks | 11:30 a.m. CTEvan Montgomery's Farm • Grand Forks

This spring, we're back on the road with Producer Shop Talks: casual, farmer-focused gatherings across North Dakota.

Grab a meal, hear updates from the North Dakota Soybean Council and the North Dakota Soybean Growers Association, and join open discussions with fellow farmers and ag experts. Ask questions, share ideas, and connect with others who care about the future of

Whether you've been farming for years or are just getting started, you're welcome. Come for the information. Stay for the conversation. **Use the QR code to register.**





North Dakota agriculture.





ou could say that Kyle Courtney is all in on artificial intelligence (AI). The fifth-generation farmer from Oakes has set his farm up as a testing ground for companies creating technologies that utilize AI in agriculture.

"We have 5G connected every acre on my farming operation," Courtney explains. "We have Wi-Fi access, so, whether it's robotics or sensors, anything that needs



NDSU researchers have developed an Al-driven robotic weeder that is currently being tested.

internet connectivity is covered in my operation at the moment."

Courtney's farm is equipped with several weather stations and multiple in-ground sensors that are feeding back through a Wi-Fi loop and generating as much data as possible.

Courtney had an early interest in AI. He's been on Grand Farms' grower advisory board for four years, which helped pique his interest in technology and gave him a front-row seat to how fast AI is moving. He's now on Grand Farms' main board and is also part of the National Science Foundation's AgTech Engine based in Fargo.

"When systems start operating with AI, the more data you have, the better," Courtney explains. "It can help you with your decision-making process."

Data Generates Output

Much like humans who see or hear information, then use their brains to consider that information before responding, artificial intelligence operates in a similar same way, according to Xin (Rex) Sun, Ph.D., endowed chair and director of the Peltier Institute for Advancement in Agricultural Technology at North Dakota State University (NDSU). Data are taken in and analyzed by a processor, which then delivers output based on that information. It's a relatively simple concept that modern technology can do at lightning speeds.

"This ag tech area, all these fancy drones, robotics, AI, what they are actually doing is collecting data," Sun says. "One important thing in this AI pipeline, whether we're doing research or anything in the farming businesses, is how can we collect that useful data to help farmers make the right decisions?"

Bad data in can mean bad decisions out.

Sun and his fellow researchers at NDSU are using AI in several areas, including disease detection for plants. Drones equipped with sensors can fly over fields and rapidly detect diseases using AI algorithms. That information can help farmers quickly determine what the disease threat is and if

action needs to be taken.

Sun is also working with robotic technology to scout sugarbeet fields, identifying disease threats.

"Basically, a camera simulates our human eyes, and then we don't have to have farmers go out in the field to scout; instead, we are sending our robots," Sun explains.

Herbicide-resistant weeds are a serious concern for many North Dakota farmers. Sun and his colleagues are using technology to build a robot weeder that could help alleviate some of those resistance issues.

Artificial intelligence is used to recognize a weed species. Then, the robot can either spot spray the weed or mechanically remove it. Five weed species are currently recognized by deep-learning AI technology.

"In the field, this robot with cameras recognizes weeds on the go," Sun states. "Then, we have mechanical components to kill the weed and the root together. For the herbicide-resistant weeds, you don't have to spray anything."

Sun describes how robotics are already used with some California fields where high-value crops, such as fruits and vegetables, are grown. In some cases, robotic weeders and mechanical pickers are replacing farm laborers. If the weeding technology works, there might



Xin (Rex) Sun, Ph.D., is leading some of NDSU's work in artificial intelligence.

be potential for use on North Dakota's expansive farms.

"If this method works, maybe you can scale the technology," Sun asserts. "We can make 10 robots or 100 robots for the large-scale farm."

Artificial intelligence can power a lot of exciting technologies, but Sun knows that, for farmers to adopt it, AI has to provide a benefit.

"We need to show how that autonomous tractors, autonomous combines can make a real benefit for the farmers," Sun says. "It doesn't matter how good your robot looks in the lab: if it doesn't work in the field, farmers will lose confidence right away. I think the key point is how can we really solve problems."

Sun maintains that AI is at a transformational stage for agriculture. Courtney agrees.

"In my opinion, the amount of transformation AI is going to have, the change in agriculture in the next decade, will be more than we've seen in the last century," Courtney contends.

That transformation is already happening on Courtney's farm.

Data Driven

Courtney describes how many farming decisions are made with native knowledge or a gut feeling.



Courtney's entire farm is Wi-Fi connected with data from numerous sensors gathered at this tower.



Oakes farmer Kyle Courtney expects artificial intelligence to be the most disruptive technology most people in agriculture have ever experienced.

Knowledge has been gained by experience or passed from one generation to the next. For example, there's often no scientific reason why farmers start spraying or planting when they do.

"Being able to have a scientific background to help us with some of those decision-making processes is where AI is really going to shine," Courtney declares. "You'll be able to talk to AI, tell it I need to spray a thousand acres of Liberty in the next five days, when am I going to get the most efficacy for using that chemical? It'll say 'Based on weather forecasts, we recommend spraying Tuesday from noon to four and Thursday from one to three,' rather than just us using our gut feel to do it right now."

Courtney expects AI to help farmers save valuable time. If he spots something on a soybean leaf that he doesn't understand, he can take a picture with his phone; upload it to an AI platform; and obtain feedback about if the situation will be detrimental to his crop or not, as well as how it should be treated. This process can be accomplished in a few moments instead of waiting for a

call back from his agronomist.

"All those things are at my fingertips instead of a phone call away now," Courtney says. "For agriculture, time is our most valuable asset. Being able to save time is crucial."

Courtney echoes Sun's assertion that the quality of the data used by AI will affect the quality of the results. Ensuring good data could mean taking the time to properly calibrate the combine so that vield data are correct because that information will be used to make future decisions.

"The more accurate data is, the more information AI is going to be able to start giving you in the years to come," Courtney states. "Even if you're not using AI now, make sure you have high-quality data to be able to start feeding these systems."

Courtney explains that farm data are going to be the new crop. Because data are what power AI, farmers shouldn't hand data over without being compensated for them. He maintains that growers should be able to help dictate the decisions that AI is used for on farms, but if farmers give those data away, they've lost that

seat at the table.

Get Familiar

AI may seem like a daunting technology, but Courtney recommends that farmers get comfortable with it. Growers can download a free artificial-intelligence platform, such as OpenAI, Grok or ChatGPT, and use it for scouting situations. Taking a picture of something in the field with which they aren't familiar, uploading it to one of those platforms and then following the responses can help farmers become familiar with AI's capabilities.

Courtney believes that it is important for farmers to get comfortable with the technology because AI is likely to be a game changer.

"Having a feel for AI is going to be the most crucial part of it," Courtney contends. "I think it's going to impact everything, whether it's precision or whether it's autonomy. The biggest risk you can take is taking no risk at all. The earlier you get comfortable with it, the more you can see how to apply it to your operation."

—Story by Daniel Lemke, photos by Lemke and courtesy NDSU Autonomy on a Smaller Scale

n 2018, Craig Rupp founded Sabanto with the goal of using autonomous technology to help address labor shortages in agriculture. The Illinois-based company has developed technology that can be retrofit on existing tractors, allowing them to operate autonomously.

The Sabanto system uses advanced cameras, obstacle-detection sensors, global-navigation satellite systems, and robotics paired with mobile and desktop applications to give operators control over the implement.

While manufacturers and technology companies are developing fully autonomous tractors, Rupp sees the autonomous platform a bit differently than some people.

"I don't think autonomy is an all or nothing proposition," Rupp asserts. "I see autonomy as an accessory to a normal tractor, almost like cruise control in a car. They didn't have to build a new car around cruise control; they just added cruise control to automobiles. I think that's the way autonomy is going to be delivered in the industry."

Over the years, farm equipment has grown steadily larger. The size and increased technology allow farmers to cover ground more quickly and efficiently. That growth comes at a price because new high-horsepower tractors can cost \$1,200 to \$1,400 dollars per horsepower, with price tags exceeding \$1 million, Rupp contends.

Instead of running one large tractor, Rupp envisions farmers using several smaller tractors to get the same amount of work done, but at a lower cost. The cost per horsepower for smaller tractors is a fraction of the price for larger machines, yet if operated autonomously around



Sabanto founder Craig Rupp (center) says his company has installed autonomous technology on tractors more than a decade old.

the clock, those smaller implements can get just as much accomplished.

"I want to see a world where the capital expenses are taken out of agriculture," Rupp says. "I think what's going to happen is equipment is going to get smaller, more cost effective, and it's going to be running longer hours"

Rupp states that one customer in Montana was given a quote of over \$2 million for needed equipment upgrades to handle the number of acres he was farming. Disheartened at the cost, the grower is instead utilizing the Sabanto system on his equipment, costing 75% less to cover the same number of acres.

Rupp describes how his company has more

than 200 systems in place in 30 states. Sabanto also operates in Canada and Australia.

"Our major focus right now is broad-acre seeding, which includes wheat, small grains, drilling soybeans, and then planting cover crops," Rupp explains. "Autonomy may not be able to do everything, like cultivating or planting, just yet, but we'll get there."

Rupp maintains that, even though his initial goal was to help with the farm-labor shortage, his company's autonomous system hasn't replaced any farm workers. Instead, the technology allows farmers to reallocate their human resources to other tasks.

Rupp grew up on a farm, went into electrical engineering and worked in the wireless industry for 25 years. The Sabanto system runs on cellular connections, but it is also equipped to utilize Starlink, a satellite-based internet network, so autonomous tractors can be connected nearly anywhere.

The autonomous technology may be cutting edge, but the equipment it's used on doesn't have to be. Rupp declares that his company has installed systems on tractors that are 12 to 14 years old.

"Farmers have quite a lot of money invested in their equipment," Rupp says. "Especially given the commodity prices today, I don't think it's fair that they have to go out and spend \$1.3 million to get the latest and greatest. Our saying is, your next-generation tractors are already in your machine shed."

—Story by Daniel Lemke, photo courtesy of Sabanto

Earn \$100 off your next seed purchase! \$6



The rewards NDSGA members have become accustomed to.

The \$100 Seed Voucher Program is another benefit that you receive when you renew your three-year membership to the North Dakota Soybean Growers Association. This voucher program is sponsored by a number of leading seed companies.



NDSGA seed vouchers are valid until June 15, 2026 on pallet or tote of soybean seed. Redeem the voucher with your local dealer.

Crunching the Numbers

s the 2025 harvest wraps up across North Dakota, farmers will spend considerable time analyzing the growing season's outcomes and reviewing the financial results. Those numbers will help shape decisions for the operation's future, so having accurate and thorough financial data is key, particularly during lean economic times.

North Dakota State University Extension Farm Management Specialist Ron Haugen says that tracking a farm's financial information is important, but that task isn't always a farmer's strong suit.

"Farmers are really good at production, but they aren't always as good at finance," Haugen asserts.

When commodity prices are strong, it's easier to be profitable, and some of the financial management oversight may not be as strong as is necessary when margins are thin. With low commodity prices and high input costs, attention to detail is a must.

"Now is a time that you really have to scrutinize it as much as you can," Haugen states. "There's no room for lax management. You have to scrutinize things in more detail now."

On the revenue side of the ledger, Haugen describes how it's important to have a marketing plan for the crops.

"You need to know what your bottom line is, and you have to know what your costs are," Haugen explains.

Haugen maintains that diversifying the farming operation can help increase revenue opportunities. Adding livestock or another value-added enterprise can provide potential revenue streams.

On the debt side, Haugen clarifies how restructuring debt so that repayments are stretched over a longer term with lower payments can help to balance the farm's financial position.

"It's still good to maintain the strongest credit you can," Haugen expounds, "which helps everybody, the lender and yourself, in these tougher times."

Haugen claims that a key to maintaining profitability during difficult times is to limit unnecessary spending. However, there may be times when hiring custom work is more cost effective than owning the equipment necessary to perform that task or dedicating workforce capital to it.

"Sometimes you need to

really scrutinize the situation and decide if it's worth it to hire some things done because, maybe, they'll get done quicker and better," Haugen says.

Equipment costs have continued to climb, so Haugen suggests leasing equipment instead of owning it as a possible way to reduce costs. He suggests that farmers may have to forgo some large equipment purchases and squeeze more mileage from the equipment they already own.

Haugen states that, in these tough times, growers need to look at everything, including the main inputs, such as fertilizer, seed, labor and land costs, as well as equipment costs. Small changes can affect the bottom line.

Land rental costs are a big expense. If a cash rental agreement is expiring, renegotiating the rate with landlords to a lower or variable rate could save money.

Haugen adds that the U.S. Department of Agriculture's Farm Service Agency offers a commodity loan program which provides interim financing at harvest time to meet producers' cash-flow needs without having to sell the commodities when market prices are typically at harvest-time lows.



Ron Haugen is an NDSU Extension farm management specialist.

This strategy gives farmers the option of marketing commodities throughout the year when prices, hopefully, rebound.

Whatever the farm's financial situation may be, Haugen encourages growers to keep lenders informed about the farm's financial status. Be honest and straightforward with your lenders. Working with lenders is always the best option.

North Dakota offers farm business-management programs that farmers can enroll in and have professional help with financial decisions. Haugen explains how instructors can also help with tax work: "Their main goal is to try keep growers in line with what they (growers) should be doing."

The NDSU Ag Hub's Workshop Spreadsheets page offers a collection of fillable Excel files designed to assist farmers and ranchers with financial planning and succession management.

—Story by Daniel Lemke, photo courtesy NDSU and stock

Scan the QR code to explore the resources.







arming is a continual process of growing and changing to be more productive, profitable and sustainable. When the agricultural economy takes a downturn, everything a farmer does can be scrutinized.

The North Dakota Farm Management Education Program, directed by the North Dakota Department of Agriculture and offered through several state colleges, is designed to provide education to farm owners/operators or people interested in farming. The program assists clients in meeting their business and personal goals.

"The goal is to help farmers and ranchers with record keeping, goal setting, really any sort of management purposes on their farm," says Linda Burbidge, Ph.D., an instructor at Dakota College in Bottineau. "We try to meet people where they're at. Some people really want to focus on their record keeping and just making sure that it's done properly. At the end of the year, we want to try to figure out how they did, whether that's in terms of financial ratios or the cost of production for their crops, so they're able to get a good picture of where they're at and what might need tweaking on their farm."

"The program is a tool for professional development to help farmers and ranchers continuously improve their knowledge, skills and competencies in order to excel in their production," asserts North Dakota Agriculture Commissioner Doug Goehring. "The greatest value is an increased perspective of one's operation. It's an opportunity to combine their passion and love of the industry with data analysis to help drive decisions."

The North Dakota Farm Management Education Program offers assistance in four primary areas: farm and ranch business records and accounting, business and family goal setting, planning, and business analysis.

There are currently eight instructors across the state who are available to assist growers.

"One of the things with farming is that you're expected to be the jack of all trades," Burbidge states. "You have to know how to run your planter or fix your combine if it breaks. When it comes to farm finances, a lot of times, that gets pushed to the back burner because it's not the most urgent thing necessarily, although it should probably become more urgent, I would argue."

Because not everyone is trained for record keeping and finances, Burbidge explains how having someone there to help farmers sift through all of their data is a helpful piece of the North Dakota Farm Management Education Program.

Burbidge states that there is usually a spike for

farmers enrolling in the program when times are tough in the farm economy. Farmers are trying to buckle down, and "a good place to start is by keeping detailed records."

Goehring agrees that challenging economic times heighten the focus on gathering good financial information.

"Not only does the program assist with



Linda Burbidge, Ph.D., is one of North Dakota's farm management education program instructors. She is based in Bottineau.





It's particularly important during challenging economic times to have a good handle on a farm's financial picture.

increased financial understanding, but it also provides the ability to study benchmarks and gain insight into other practices, systems and operations from other producers," Goehring says. "This is especially true when operators are highly leveraged."

North Dakota Farm Management Education Program instructors are available at Dakota College in Bottineau, Lake Region State College in Carrington and Devils Lake, and North Dakota State College of Science in Wahpeton.

Burbidge contends that the program has about 250 farm operations which are currently being served. Most farmers connect with the instructor located closest to them, but that proximity is not a requirement.

There is a cost to enroll in the program, but Burbidge states that, typically, there are tuition grants available to help offset that cost.

"If they (farmers) contact an instructor, then that instructor can reach out to them and explain more about the enrollment process and the costs associated with it," Burbidge asserts. "Even if you wanted to enroll in the middle of a semester, we would still get you enrolled and then go from there in terms of working with you. It wouldn't be an issue to enroll anyone in the middle of the year."

In terms of a per-bushel or per-acre cost, having another set of eyes helping to evaluate records can offer peace of mind or more.

"Last year, I helped someone avoid a \$22,000 mistake, so that makes you feel good when you catch some of those things," Burbidge explains.

Burbidge describes how bankers and other lenders appreciate when farmers work with the North Dakota Farm Management Education Program because growers have a third party verified balance sheet, which gives lenders more confidence in the financial information that is received.

In addition to financial analysis, Burbidge declares that instructors can also help famers and ranchers with other management considerations, including equipment purchases and farm transition planning.

While the program is tailored specifically for farmers and ranchers, Goehring says that commodity groups, bankers and anyone interested in understanding the bottom dollar about raising an ag commodity or about operating an ag enterprise can do so through the program's data collected. The information is free and is available on the website. The data are aggregated, so the producer's personal information is kept confidential.

More information about the North Dakota Farm Management Education Program is available at ndfarmmanagement.com.

> —Story by Daniel Lemke, photos courtesy of ND Farm Management Education Program, United Soybean Board, and stock.



DECEMBER 3, 2025

From 8.30 am to noon CST Supported by North Dakota Soybean Council

Certified crop adviser (CCA) credits will be available

There is no participation fee



FOR MORE INFORMATION

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Extension Weed Specialist

Ana Carcedo **Extension Broadleaf Specialist**

Frayne Olson

Ext Agribusiness & Appld Econ



Predicting Better Soybean Varieties



ne key decision that farmers make each year is choosing which soybean variety to plant on their farm. Those varieties are developed by breeders who compare nearly countless genetic lines to develop soybean seeds with the desired traits.

"Decision making is what actually makes a breeder a breeder, not the actual pollinations," says North Dakota State University (NDSU) Assistant Professor and Soybean Breeder Carrie Dottey, Ph.D. (formerly Carrie Miranda). "A breeder must select two outstanding soybean varieties or lines that, when crossed, have the potential to produce offspring or progeny combining the best traits of both parents."

Breeding is a complicated process that can take years and thousands of lines to determine if a soybean variety has what it takes to succeed on a North Dakota farm.

Dottey states that, depending on the size of the program, breeders may be doing 50 to 100 different kinds of parental crosses, then growing out 200 to 250 of each cross combination.

"I don't like to exceed about 10,000 unique lines to evaluate in a given year," Dottey asserts.

According to Dottey, the breeders would walk those 10,000 rows several times once the plants started to mature so that the researchers could get an idea about what the plant will look like in the field. From there, perhaps 10% of those lines would be selected for further development. Visual cues don't always indicate the genetic material inside the seed. Soybean cyst nematode resistance or drought tolerance may not be readily evident.

"As a breeder, there's a little bit of insecurity. You just hope you're making the right decisions," Dottey admits.

Dottey describes how NDSU is developing a prediction tool that will utilize the plants' genomic data to give breeders more insight about which genetic lines might make good parents.

"You start with lines that have really excellent data that have some connection to your breeding program and you have the genotype data. Then, you correlate that genetic information to the yield data or whatever trait you're interested in," Dottey explains. "You can make prediction models for yield. You can make prediction models for protein. You can make actual prediction models for the correlation between protein and oil. If you want a line that has high protein and high oil, that's very difficult to breed for, but you can make a computer model that will tell you which line is going to have an advantage for having higher protein and higher oil at the same time, as long as you train your model appropriately."

Dottey says that the NDSU soybean breeding program has genotyped all of its genetic lines that have been in yield trials since 2021. That effort was supported by the North Central Soybean Research Program. That extensive amount of data can now be used to train the NDSU models for different types of trait prediction.

The North Dakota Soybean Council (NDSC) is funding the genotyping of younger genetic lines that are coming through the NDSU breeding program.

"The goal is to genotype lines that haven't yet been tested in the field," Dottey explains. "Before collecting any field data, I want to be able to look at the genotype and confidently predict whether a line will have high protein or the right maturity to perform well in places like Minot."

"The genetic prediction models will be another tool in the toolbox that we will use to bring more locally adapted, better varieties for farmers," asserts Miki Miheguli, NDSC director of agronomy and research. "That is why the NDSU public breeding program is focusing on developing these prediction models."

Dottey contends that these models could help breeders determine, with a relatively high level of certainty, that a line would have higher yields than a check plot. The models could also help determine if certain combinations would or wouldn't perform well, which is also valuable information.

In addition, the prediction model can help breeders select parent lines that can be crossed to potentially deliver desirable traits. Dottey describes how NDSU used that technique for the first time in 2025.

As with other forms of artificial intelligence, these prediction tools are meant to complement, not replace, human expertise.

"These tools are incredibly helpful and complement our decision making, but I'd never rely on them entirely," Dottey maintains. "They're great for validation, and their real strength is in uncovering patterns or relationships we might overlook because of time constraints or limited data: they can process far more information than we can."

Dottey adds that private companies have been using genomic prediction models for years, so farmers have likely already planted varieties which were advanced through the use of that technology. Many high-yielding varieties on the market were likely developed this way.

"With public breeding programs using these tools, we're able to look beyond yield alone," Dottey explains. "These programs allow us to focus on traits like disease resistance and tolerance to abiotic stresses. I'm also develop-



ing prediction models for iron deficiency chlorosis and drought, so we can strengthen yield protection across multiple challenges."

The prediction tools may be able to hasten the pace of variety development as well as producing lines that perform in North Dakota's various environments and conditions.

"Technology will, hopefully, make farming not only easier, which everyone appreciates, and more affordable, which everyone needs; but, ultimately, more profitable in the long run," Dottey says.

—Story by Daniel Lemke, photos by staff



Artificial intelligence is helping streamline the process of breeding successful soybean varieties at NDSU.

Using IDC Scores to Pick the Right Soybean Varieties for 2026

imilar to last year, cool and wet conditions caused prolonged iron deficiency chlorosis (IDC) symptoms in North Dakota's soybean fields, says Ana Carcedo, Ph.D., North Dakota State University (NDSU) Extension broadleaf crops agronomist.

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. Choosing soybean varieties which are less susceptible to IDC is the first line of action to deal with the disease, advises Carcedo.

According to Carrie Dottey, Ph.D., NDSU 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 2026 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 2025, ND-SU's soybean breeding program evaluated 131 Enlist, GT27, Roundup Ready, Xtend and conventional soybean varieties for IDC tolerance.

IDC symptoms include yellowing of plant leaves with green veins as well as yellowing, browning, and stunted growth during the



Selecting a soybean variety with IDC tolerance is an important management decision that can help producers minimize the negative impact of chlorosis on yield.

early stages, leading to reduced soybean yields. The test results are based on replicated trials that were 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. Ratings were recorded at three different soybean growth stages.

The test results are available at vt.ag.ndsu.edu/list/soy. NDSU's soybean variety trial yield data will also be published at this link.

While IDC tolerance is important, producers are advised to consider the yield potential and other important traits for the soybean varieties. Varieties with similar IDC tolerance can have significant differences for their yield potential.

The North Dakota Soybean Council provided funding for the iron deficiency rating studies.

—Story and photo courtesy of NDSC Extension





he soil provides a multitude of vital services, including climate regulation, water purification and nutrient cycling, in addition to supporting plant life. With the ground filling all those roles and many others, soil health is justifiably a major concern for people involved with agriculture and beyond.

North Dakota State University (NDSU) Extension Soil Health Specialist Carlos Pires, Ph.D., is building the case for soil health across the state's diverse landscape.

"My research program is trying to identify opportunities for North Dakota growers to implement soil health principles," Pires says, "so these principles will ensure that we have a healthy soil or that we are at least improving soil health over time."

Pires explains that there are four principles for soil health: minimizing soil disturbance to maintain soil structure, maximizing soil cover, enhancing the soil's biodiversity through crop rotation and livestock integration, and maintaining continuous living roots in the soil.

Pires contends that soil health is a long-term issue. Farmers are paying increased attention to it. Pires describes how he heard from a lot of farmers who were concerned after seeing the amount of soil in the ditches this past winter as a result of wind erosion. Knowing what needs to be done is important, but concepts have to be put into action.

"We know improving soil health can be complex because it requires that farmers implement their knowledge into production," Pires explains. "It's not a cake recipe where you just follow everything, and it's going to work out. We need to assess things on the go."

Pires states that NDSU Extension is working to create information and to generate data in order to help farmers in the decision-making process of implementing soil health practices. Having data that show the results of certain actions can help growers better understand the effect of those decisions.

"When I'm recommending soil health practices to farmers, I need to know and I need to be able to tell them what the probabilities of a yield decline are in the first and second year until things actually kind of shake around and settle," Pires asserts.

Pires has been with NDSU for about a year and is actively building that database of information to help farmers understand the potential results of implementing soil-health practices.

Pires and other NDSU Extension staff have taken their soilhealth message on the road in 2025

with the help of the Soil Health Express, a trailer that brings handson soil demonstrations directly to farmers, ranchers, crop advisers, students and even children.

The Soil Health Express is supported by the North Dakota Soybean Council and other agriculture groups. The trailer includes a rainfall simulator, showing how different soils react to rainfall as well as how much soil and nutrients are potentially lost. The Soil Health Express is equipped with a wind simulator to demonstrate how much soil is lost with different management conditions.

It takes thousands of years to build one inch of soil. Pires says that data from North Dakota show how some parts of the state have lost as much as 20 inches of topsoil, so farmers need to protect what's there.

"We are not even farming our rich, dark topsoil," Pires stats. "We are already farming the subsoil. We just don't know it because everything happens at a slow pace, so we can't see all the soil going away. This is the reason these demonstrations are impactful because we are able to show farmers what's happening, in reality, with these demonstrations.

The Soil Health Express also contains a variety of plant roots to show how deep the roots can go and how crop rotation can have an effect on soil health with North Dakota's diverse conditions.

—Story by Daniel Lemke, photos by staff



The NDSU Soil Health Express traveled across the state this year promoting the value of soil health practices.

Sharing the Soy Story this Fall





On September 13, the North Dakota Soybean Council (NDSC) partnered with Downtown Fargo's Red River Market, highlighting the versatility and importance of soybeans.

Visitors to the NDSC booth sampled a variety of soy goodies, including Chocolate Chip Soy Nut Cookies, vanilla soy lattes, tofu snack bites, and roasted soy nuts. Guests also received a complimentary cookbook, tested their knowledge with the trivia wheel, and learned about innovative, sustainable soy solutions such as Firefighting SoyFoam™ and biodegradable bar and chain oil.

The event was a success, with participants expressing appreciation for the chance to learn more about the many ways soybeans contribute to everyday life.

Soy Behind the Flavor at the North Dakota BBQ Championship

Great BBQ starts long before the meat hits the grill. North Dakota soybeans help feed the animals that become the delicious protein we enjoy.

On October 4, the 14th annual North Dakota BBQ Championship was held at Scheels Home & Hardware in Fargo; the event drew competitors from across the U.S. and Canada for some tasty, spirited competition.

NDSC highlighted how U.S. soy supports the flavors we love, from juicy ribs to tender chicken. The event also provided a fun and engaging way to connect attendees and barbecue competitors with the value of soybeans.

Fun fact: 97% of U.S. soybean meal goes into livestock and



In partnership with the North Dakota Soybean Council, Soy Combine Awards recognized the top combined scores in ribs, chicken, and pork at the ND BBQ Championship. All meats were from soy-fed animals.

poultry feed, fueling the very foods featured at the event.

Congratulations to the U.S. Soy Combine winners who earned the top combined scores for pork, ribs and chicken, all soy-fed meats.

North Dakota and U.S. Soy farmers are proud to grow sustainable, nutrient-packed soybeans that support healthy animals, great food and good times around the table.

—Story and photos by staff



NDSC teamed up with Fargo's Red River Market to showcase the versatility of soybeans.





very year, the NDSC's
Food & Farm Tour
turns the spotlight on
North Dakota agriculture, inviting chefs, influencers,
nutrition professionals, students,
and farmers to explore, taste, and
connect. Since 2018, the tour has
provided a unique opportunity

that draws in participants not only from across North Dakota, but also nationwide.

This year's event attracted 15 nutrition professionals with wide-ranging backgrounds, some with sizable social media followings, and 24 culinary students from the North Dakota State College of Science (NDSCS) in Wahpeton. The Food & Farm Tour included a well-rounded program, featuring up-to-date nutrition information about soy foods from renowned experts Mark Messina, Ph.D., director of nutrition science and research at SNI Global; and Linda

Funk, executive director of The Soyfoods Council. Attendees also had a hands-on cooking session at NDSCS, visited NDSC Chairman Jim Thompson's farm and got a soybean processing facility tour.

"The Food & Farm Tour allows us to bridge the gap between agriculture and the people who influence food conversations," says Shireen Alemadi, NDSC outreach and engagement director. "By offering firsthand experiences, we are helping shape a deeper understanding of where food begins, and how soy contributes to a healthy diet and a sustainable future."

Participants left the two-day event with some diverse experiences

"My dad was actually a soybean farmer, so I was really interested in seeing beyond the harvest, to what happens to soybeans," states Becky Feltman, a registered dietitian and human resources manager in Fargo. "As a registered



Participants got hands-on cooking time at NDSCS, preparing and enjoying delicious soy-based meals.



dietitian, I'm very interested in all of the nutrition that is in soybeans and what we can do with it."

Sarah Tee owns and operates Inspire Nutrition in Fargo. She's also the current president of the North Dakota Academy of Nutrition and Dietetics. She describes how participating in the event goes beyond cooking with soy or walking through a field.

"It's also about gaining a true farm-to-table perspective: seeing soybeans in the ground, following them through processing and then turning them into foods like homemade tofu," Tee asserts. "These experiences make the journey from soil to plate personal, meaningful and practical for the work I do every day."

The Food & Farm Tour reached beyond North Dakota because participants came from as far away as Tennessee and Florida.

Rosanne Rust traveled from Florida to take part in the event. She operates Rust Nutrition Services and has authored several books.

"I have been a fan of farmers for a couple of decades," Rust explains. "I really enjoy sharing the story of farming with consumers. There's a lot of misinformation about where food comes from and the tools farmers use, and I like to



After hands-on cooking with soy ingredients, participants enjoyed a delicious lunch at NDSCS and were impressed by the flavors of every dish.

shed light on that so people can feel confident in the foods they choose."

Shireen Alemadi notes that most participants leave the tour amazed at how interconnected everything is, from the farm to the table, and at how much farmers care about the land and the food they grow.

Chelsea LeBlanc, from Nashville and owner of Chelsea LeBlanc Nutrition, is a longtime fan of soyfoods and incorporates them into her diet regularly. She also values meeting the farmers and seeing the process firsthand.

"I'm always really interested to meet the farmers and hear their story, to see how soy is harvested, processed, and eventually reaches our table," says LeBlanc. "It's fascinating to see the full process and get the complete picture."

—Story by Daniel Lemke, photos by staff



Jan. 28, 2026 – Grand Hotel, Minot, ND Feb. 4, 2026 – Alerus Center, Grand Forks, ND Feb. 5, 2026 – Courtyard by Marriott, 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!

Thank you to our sponsors!











Participants enjoyed an educational tofu and soymilk demo at Northern Crops Institute.





ost North Dakotans are never too far from a convenience store where they can pick up a few needed food items, such as milk or snacks. However, access to healthy, affordable food from a local grocery store can be much more challenging, especially in rural areas.

In North Dakota, efforts are underway to help improve access to food and to keep rural grocery stores viable because of the important role they fill.

"In the big picture, grocery stores seem to rank up near the top of essentials for community viability alongside healthcare and emergency services," says Ellen Huber, the North Dakota Association of Rural Electric Cooperatives' (NDAREC) rural development director. "We aren't going to retain residents in a community or attract new residents to pursue the job and business opportunities that are available without grocery stores in those communities that provide access to perishables like produce, meat and dairy products."

Local food access has dwindled in recent years. Information from the NDAREC shows that the number of rural grocery stores in North Dakota has fallen from 137 in 2014 to just 90 in 2025.

Building a Hub

The Rural Development Finance Corporation (RDFC), staffed by the North Dakota Association of Rural Electric Cooperatives' (NDAREC) rural development center, received a \$12.6 million grant from the Bush Foundation to lead a multi-year effort aimed at improving access to healthy, affordable food in rural North Dakota. The investment supports planning, developing and launching a pilot, regional grocery and local food hub to serve north-central North Dakota. The approach is to reduce wholesale costs through cooperative purchasing and to expand market access for local food producers.

Huber illustrates how the Rural Access Distribution Cooperative, which is operating in Walsh County, was the first initiative to foster a shared-services cooperative where participating entities purchase collaboratively and redistribute the groceries. Work is underway to form the North Central Regional Food and Grocery Hub that would offer the benefits of shared buying

power along with storage and distribution channels.

"One of the issues is wholesale costs," Huber states. "Often, a rural grocery store is paying more for a product wholesale than consumers can buy it for on the shelves of a big box retailer."

Huber describes how Minot's economic-development leaders recognized that they need surrounding rural communities to be strong for their larger city to be strong, which is why that area was selected for this pilot initiative. The closings of distribution warehouses in Minot and Bismarck meant that the closest distribution centers were in Fargo and Billings, Montana.

"This larger regional effort looks at how to broaden markets for local food producers and to get more access for consumers in our state," Huber explains.

Huber asserts that collaboratively purchasing and redistributing conventional groceries will likely be the first aspect of the pilot project. There's an added component of working with local food producers who could benefit from distribution channels and access to markets while providing locally grown food products to consumers. The grant funds which the NDAREC has received are initially being used for planning and development work, but the grant will also be used for constructing or renovating a property as well as purchasing the equipment necessary to get the hub up and running. Huber contends that funds will also help equip grocery stores for collective purchasing.

Huber says that there are at least eight interested grocers in the region, but she would like to build on that number.

"We need to go into the phase of truly examining the costs and the benefits of the collaboration to make sure that there's enough benefit, cost savings or improved access to a larger variety of fresh foods to justify the costs of setting up a purchasing and redistribution structure," Huber proclaims.

In addition to the North Central Food and Grocery Hub pilot project, Huber indicates that discussions about forming similar efforts are underway in other locations around the state.

The importance of local grocery stores isn't lost on the North Dakota legislature. Eleven rural communities across North Dakota were awarded a combined \$1 million through the Rural Grocery Store Sustainability Grant program which lawmakers funded to support local food access and economic development. These grants are intended to help sustain and strengthen grocery services in small towns, ensuring that residents have access to fresh, affordable food close to home.

Huber reveals that there were 47 applications for the funds, totaling more than \$4.8 million, an indication that there are still many unmet needs.

—Story by Daniel Lemke, photos courtesy NDAREC



GLOBAL AQUACULTURE IS ON THE RISE

U.S. Soy Protein Goes Global with WISHH









Partners in Advocacy

s biofuels climb in importance for agriculture, the connection between farmers and the nation's oilseed processors is more important.

The National Oilseed Processors Association (NOPA) is a trade association that represents the United States' soybean, canola, flaxseed, safflower seed and sunflower seed crushing industries.

"We represent about 99% of the soybean crush in the U.S.," says Ryan Locke, NOPA's vice president of engagement.

NOPA represents its members' interests regarding federal legislative and regulatory policies, as well as international trade policies, that affect the global flow of oilseeds and oilseed products. As biofuels become a greater part of the value chain for oilseed crushers, so does the biofuel policy.

"Our first, second and third priorities have been the Renewable Fuel Standard (RFS)," Locke states. "We were extremely pleased with the passing of the One Big Beautiful Bill that included improvements to the 45Z Clean Fuel Production tax credit, and the guidance out of the Environmental Protection Agency (EPA) on the advanced renewable

volume obligation (RVO) numbers, but we still have to see that through to implementation and finalization of the rule."

The EPA RVO proposal called for substantial increases for blending biomass-based diesel in 2026 and 2027. Increased volumes will benefit both processors and farmers.

In addition to biofuels, Locke describes how NOPA is actively engaged with the Department of Health and Human Services as well as other federal agencies regarding the Make America Healthy Again (MAHA) commission. The initial MAHA report vilified seed oils as unhealthy when research shows that oilseeds are a heart-healthy and nutritious food ingredient.

"We're getting pulled more into this overall food and nutrition policy space, which is a new area for NOPA," Locke asserts. "We're trying to reinforce, not just with nutrition policy and not just within MAHA, that we need to follow the science to make these policy recommendations and to guide the conversation based on established science."

NOPA represents the crushing industry, but because farmers supply processors with the needed oilseeds, agriculture issues often mesh with processor concerns. NOPA fre-

quently partners with organizations such as the American Soybean Association (ASA) and state soybean associations to lend horsepower to the advocacy efforts.

"We're excited to use our voice to help give farmers a voice," Locke contends. "Without farmers, none of us are here. So, we have to make sure that we're doing right by them and we are focusing on the issues that are important to them."

Locke says that NOPA and soybean organizations must be proactive with seeing the developing issues and concerns while making sure that constituents are prepared for potential rule changes. An example is the 45Z biofuel tax credit which was included in the budget reconciliation package that was passed by Congress in July. The 45Z tax credit incentivizes the production of clean transportation fuels with lower lifecycle greenhouse-gas emissions.

Draft 45Z guidance initially tilted values for biofuel feedstocks to imported products, such as used cooking oil, based on the perceived environmental impact. NOPA; the ASA; and state groups, such as the North Dakota Soybean Growers Association, worked to make that sure domestically produced oilseeds weren't unduly penalized by Indirect



Ryan Locke, NOPA Vice President of Engagement.

Land Use Change (ILUC) so "that U.S. soybeans and other soft seeds aren't considered feedstocks of last resort," Locke stated.

There are synergies between NOPA and organizations such as the ASA. Locke describes how NOPA brings a wealth of industry expertise and thought leadership about oilseeds issues while the ASA represents farmers who grow the feedstocks.

"When you sit at the table, you want to have a complete coalition," Locke explains. "The farmer has to win. ASA and state affiliates are the voice of the farmer. If we're going in to advocate for something, even though we speak for our members, if we don't have the farmers perspective in mind, it's an incomplete thought."

—Story by Dan Lemke, photo courtesy of NOPA

Agriculture and Water Management

Interim Committee Continues its Work

n September, the Agriculture and Water Management Interim Committee held its first meeting at the Capitol in Bismarck. The meeting was divided between presentations about a study related to wetland regulations and the tax treatment of inundated agricultural land, and a study about the agricultural insurance discount program.

The presentations covered a vari-

ety of issues and raised questions for further consideration as the studies moves forward. One study contemplates inundated land for which the landowners have not been financially compensated and lands under wetland easements for which landowners would have received financial compensation. Representatives from several counties, including Ramsey and Stutsman, provided

examples. In addition, the Dickey County tax director discussed the county's approach for the taxation of inundated lands. Some landowners don't apply for a tax reduction because of the extensive paperwork, or they simply want to contribute to the county's tax base which, otherwise, would shift those taxes to other property owners.

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LEGISLATIVE UPDATE



Parrell Grossman Legislative Director, NDSGA Email: parrell.grossman@ndsga.com

Crop Insurance Changes for 2026

he budget reconciliation bill, also called the One Big Beautiful Bill Act (OBBBA) and passed in July, directed \$59 billion toward core farm safety-net enhancements, including nearly \$6 billion for crop insurance, according to the Congressional Budget Office.

North Dakota State University Senior Research Economist Dylan Turner, Ph.D., says that the biggest news for most farmers from the OBBBA is the insurance subsidy rate increases, which have gone up across the board.

"It varies by the specifics of the crop insurance policy, but in general, a lot of farmers will see a subsidy rate that's three to five percentage points higher for next year," Turner explains. "Based on last year's crop insurance numbers, those subsidy rate increases are going to be worth about \$44 million in lower out-of-pocket costs specifically for North Dakota. Soybean producers can expect roughly \$11 million collectively in lower crop insurance premiums, which comes out to about one to two dollars per acre."

Turner states that, if farmers buy the same policy they purchased last year, they're going to benefit because they will see generally higher subsidies and lower out-of-pocket costs.

Farmers can bundle acres together in a single policy through enterprise units. Turner asserts that farmers take on a little more risk that way, but in exchange, they get a lower premium rate. Even though subsidy rates, in general, rose, enterprise units at most coverage levels stayed the same.

"I still expect a lot of people to buy enterprise units, but compared to the other options, they may not be perceived as as good of a deal as they were in the past," Turner maintains.

A decision which farmers need to consider for 2026 involves a supplemental coverage option (SCO). Turner describes how the SCO tracks an index rather than the individual farmer's production and losses. The SCO follows county-level revenues.

"If you buy that policy, you get a payment if the county revenue

drops below its historic baseline," Turner declares.

Historically, Turner says that there was a stipulation preventing farmers from enrolling in SCO if they had base acres enrolled in the agricultural risk coverage option, which is a popular plan among farmers. Starting with the 2026 crop year, many farmers who didn't have the option to enroll in the SCO in the past may now be eligible.

"That option also had a subsidy rate increase," Turner adds. "It's going from 65% to an 80% subsidy, so, I suspect that might be an attractive option for a lot of farmers."

While it wasn't part of the reconciliation bill, farmers have a new choice called the margin coverage option for the 2026 crop year. Like the supplemental coverage option, it's an indexed plan that tracks operating margins and issues a payment when those margins drop below a certain threshold. Turner states that the program tracks area revenues and some key input costs.

Traditional crop insurance policies don't consider input costs



NDSU Research Economist Dylan Turner, Ph.D., says that the biggest news for most farmers from the One Big Beautiful Bill Act is the insurance subsidy increases.

and only compensate for revenues. With rising input costs as a major concern for growers, Turner expects the margin coverage option to be of interest to farmers.

"I think most farmers will say crop insurance is their first line of defense against revenue declines," Turner explains. "Crop insurance participation rates are high, especially in North Dakota, so I think a lot of farmers will keep doing what they're doing but be happy about paying less for it."

—Story by Daniel Lemke, photo courtesy NDSU

-Story continued from page 30

The committee's discussions included concerns related to management issues with federal wetland easements. These comments primarily focused on concerns about maintaining road infrastructure as well as having to compensate the federal government for additional easements with road improvements.

The committee also focused on farm safety programs. Legislative Council staff provided a background memorandum regarding the committee's study about the feasibility and desirability of creating a program that would allow a farmer or rancher to complete a safety course to receive a discount on the insurance relating to the individual's farming or ranching

operation. There were presentations by the North Dakota Insurance Department, the North Dakota Workforce Safety and Insurance Department, North Dakota State University Extension Service, the North Dakota Safety Council, Farmers Union Insurance Company and Nodak Insurance Company. These presentations focused on the availability of farm safety training programs and whether safety discounts were available or appropriate. A recording of the September 11 meeting is available at bit.ly/NDAgWaterMngtVideo-Sep25

This committee met again on November 13 for presentations and a discussion regarding the committee's studies about water and wetland regulations, the taxation of inundated lands in the state, and the formula to perform an economic analysis for assessment drain projects and the projected cost threshold for conducting the economic analyses.

Per House Concurrent Resolution 3018, which requires studying the taxation of inundated lands, the committee is further examining this issue. Additionally, the committee is addressing the House Bill 1218 study relating to comprehensive water development plans and economic analysis for an assessment drain project.

North Dakota water users maintained that the thresholds for requiring economic assessments were too low, delaying or preventing the commencement of important water projects. The North Dakota Soybean Growers Association supported this legislation. Ultimately, a temporary moratorium was placed on the economic analyses for drain projects, and the legislation was converted to a study.

Per Senate Bill 2210, future committee meetings will take up the issues of wetland regulations and water management based upon watershed boundaries. This bill directs the committee to study the feasibility and desirability of assigning management authority for the state's waters to the area located in the naturally occurring watershed, rather than assigning management authority based on the political subdivision's boundaries.

The video from the November 13 meeting is available on the Legislative Council's website at video.ndlegis.gov.

Dicamba Optimism Delayed

n July, the Environmental Protection Agency (EPA) released its proposed registration for three dicamba products to control weeds in dicamba-tolerant soybeans and cotton. The list includes a low-volatility dicamba product from Bayer Crop Science, Engenia® herbicide from BASF and Tavium® with VaporGrip® Technology from Syngenta.

The proposed dicamba registration would, once again, allow postemergence, over-the-top applications for soybeans, something which was prohibited in 2025.

The EPA conducted what it called a "robust human health risk assessment" for these proposed products and did not identify any human health or dietary risks of concern. The agency proposed putting several additional measures in place to protect against the ecological risks found in its assessment.

Following the EPA's preliminary announcement, a comment period was established to allow for feedback on the proposal. The comment period ended in early September, but farmers and others in the ag industry are still waiting for the outcomes and for final registration approval.

"This product is critical for post-emergent weed control for soybeans, so we were encouraged to see some movement there," said Madelyn Derks, director of government affairs for the American Soybean Association (ASA). "ASA evaluated the proposal, worked with our soybean growers and submitted comments, but as for next steps, we're kind of in a holding pattern."

Derks stated that the EPA received hundreds of submissions to its comment portal.

"We know (the) EPA has their work cut out for them to review those comments, so we're in that waiting period," Derks described. "We're hoping that evaluations result in some necessary changes that would make a label more workable, usable and cost effective for soy growers."

The EPA's proposed registration included several conditions, including expanded down-wind buffer zones, temperature-dependent applications and other stipulations. Those requirements may or may not be on the final label. Farmers and registrants won't know for sure until the final label

is approved.

"The EPA is reviewing the comments that were received during that period before they'll issue a final registration for dicamba," asserted Boone McAfee, director of stakeholder relations for Bayer Crop Science. "It's in (the) EPA's hands at the moment, but we are hopeful that growers will have access to over-the-top dicamba for the 2026 season."

Once a label is approved, it will still take time for manufacturers to get the product flow going and into the hands of farmers.

"We know that it's not just EPA putting out a label for soybean growers; it takes time for registrants to then take that label and put that into use in production

on their products, and have it ready for a growing season," Derks explained. "It's not as simple as snapping your fingers."

Derks said that the ASA was initially optimistic about the proposed label, which would make dicamba available to farmers again. After reviewing the fine print, the ASA identified several areas for improvement to give growers more flexibility. For instance, the proposed temperature cutoffs could limit application in some regions more than others.

"The label is important, but we want to make sure that our growers can actually use the label and (that) it's flexible and workable for them while also being cost effective." Derks contended.

Until the EPA delivers its final label, uncertainty remains regarding when and how producers will be able to use those products in 2026.

"It's just going to depend on that final label," said Boone McAfee, director of stakeholder relations for Bayer Crop Science. "Until we get that final label and see what it says, elements of the label are subject to change, so we are waiting for (the) EPA to complete their process. Bayer stands behind our technology, and the value it provides to soybean and cotton farmers across the U.S., and we are hopeful that growers will have access to this important tool in time for the 2026 season."

No timetable has been given for final EPA approval.

—Story by Daniel Lemke, photo courtesy ASA



Madelyn Derks is director of government affairs for the American Soybean Association.

Why NDSGA Membership Matters

Joining the North Dakota Soybean Growers Association (NDSGA) gives farmers a stronger voice in Bismarck and Washington, D.C. Together, we work on your behalf to protect your land, your livelihood, and the future of North Dakota agriculture.

Recent Wins in North Dakota

Advocating with Senator Hoeven

- NDSGA has worked closely with Senator John Hoeven to ensure farmers' priorities are represented in Washington.
- On October 21, Senator Hoeven met with President Trump, Agriculture Secretary Brooke Rollins, Secretary Bessent, and U.S. Trade Representative Ambassador Greer to discuss trade, rising input costs, and challenges facing livestock producers.
- Following these discussions, USDA resumed key Farm Service Agency operations, including:
- Farm loans
- Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) payments

Working with Congresswoman Fedorchak

- NDSGA has worked closely with Congresswoman Julie Fedorchak and her staff to advance the interests of North Dakota soybean farmers.
- On October 3, she sent a letter to President Trump requesting:
 Immediate bridge payments to help offset market losses
 Support for farmers facing low local soybean prices
- Her leadership highlighted the need to strengthen family farms, reduce input costs, and expand markets for North Dakota soybeans.
- On September 4, Rep. Fedorchak organized a call with NDSGA and other state farm groups to speak with the Office of the U.S. Trade Representative about the importance of trade and market access for North Dakota soybean farmers. The discussion focused on maintaining access to the Chinese market and advancing trade agreements for U.S. soybeans with additional countries.

Wins at the National Level

Your Voice in Policy and Regulation

NDSGA monitored and responded to policies that affected farmers' operations. Recent letters of support included:

- Bipartisan Farm Bill Efforts
- EPA approvals for key crop protection products including dicamba and diflufenican
- Renewable Fuel Standard proposals to boost soybean and biofuels markets
- Farmer input on MAHA reports
- State-level clean fuel programs in New Mexico and Washington

National Impacts Through ASA

- NDSGA has worked with the American Soybean Association to advance trade and market stability.
- Recent U.S.-China trade commitments include:
- 12 million metric tons of U.S. soybeans for the remainder of the marketing year
- At least 25 million metric tons annually through 2028
- These purchases will help restore long-term demand and confidence in U.S. soy.



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: □ Cattle □ Hogs □ Poultry □ Dairy
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
	□ 1-Year Professional Membership: \$110 □ 1-Year Student: Free
Phone:	☐ Check enclosed (please make checks payable to NDSGA)
Cell:	☐ Credit Card: Visa / MasterCard / Discover / American Express
Email Address:	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



Rep. Daniel Vollmer, Willow City

ep. Daniel Vollmer expected a learning curve during his first year in the North Dakota Legislature. He wasn't wrong.

"Being a freshman, this was my first session as a legislator, so the learning process was pretty steep," Vollmer says. "To be an effective legislator, it takes a lot of work to research and learn the issues."

Vollmer, from Williow City, was elected in 2024 and represents District 6.

Vollmer grew up by Willow City and graduated from North Dakota State University (NDSU) with a degree in animal science and an emphasis on ag economics. He worked as an NDSU Extension agent before being recruited into the banking industry and working as an ag lender in Jamestown.

"It was in the early 1980s, and agriculture was really having a tough time," Vollmer recalls. "I spent a lot of time with problem loans. It was a tough learning experience. There was quite a restructuring in the ag industry at the time, but it was a good learning experience for a young banker."

Vollmer stayed connected to the home farm, but as the oldest of five siblings, there wasn't a real opportunity to come back to farm. Therefore, he remained in the banking industry. Vollmer moved to the Rolla area, later running a bank's holding company while maintaining a connection to the home farm.

Vollmer sold the holding company to Dacotah Banks, Incorporated in 2000.

"We merged with them, so they asked me to stick around," Vollmer states. "I became regional president to supervise our banks in North Dakota and a couple in South Dakota until I retired in 2021. That's when my wife and I moved back to the farm."

In addition to serving in the legislature, Vollmer helps his daughter and son-in-law on the farm.

Not long after Vollmer returned to Willow City, friends and neighbors encouraged him to run for office, which he did.

"The state of North Dakota has been very good to my family. My brothers and sisters and I have been successful, so I thought maybe it was time to give some time back to the state," Vollmer explains.

Vollmer serves on the House Agriculture and Industry, Business and Labor Committees as well as the Interim Water Topics Overview Committee. He's concerned about water-related issues and growing the state's economy.

"With my background in finance, it's very important that we keep our state in really good financial shape," Vollmer contends. "I'm pro-business and would like to broaden our tax base and be successful in growing the economy. In North Dakota, we're so heavily dependent on agriculture and oil, gas, and coal. Over 50% of our state budget revenues come from those sources. They're commodity-based, and they can be volatile. So we need to continue to diversify the economy."

Vollmer describes how the legislature did a number of good things for agriculture during the recent session. Vollmer carried House Bill 1318, which established that pesticide labels approved by the Environmental Protection Agency (EPA) are sufficient to meet the state's labeling requirements. If a pesticide is registered with the EPA and its label is consistent with EPA standards, it also satisfies North Dakota's health-and-safety warning requirements. North Dakota was the first state to pass such a law. Opposition to the bill came from trial lawyers and environmental groups.

Despite the challenges of being a first-term legislator, Vollmer says that he learned a lot and is committed to representing his district as well as the people of North Dakota.

"I just want to be effective and do good things for the state," Vollmer explains. "Some days in the legislature can be frustrating, but other days can be pretty rewarding."

—Story by Daniel Lemke, photo provided by ND Legislative Assembly

BND Relief Program in the Works

The Bank of Nor th Dakota is developing a relief program to help farmers weather the current economic challenges. The program will reportedly work with local banks and credit unions to help producers refinance debt. The possibility was discussed at the North

Dakota Industrial Commission meeting in October.

North Dakota farmers have dealt with extreme weather challenges in 2025 as well as market disruptions that have hampered ag exports, especially for soybeans. Low commodity prices and high input costs are also adding to the financial strain across North Dakota agriculture.

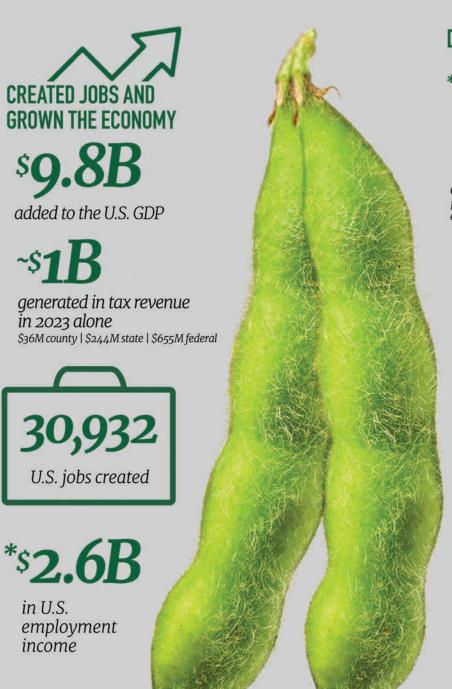
The relief program would likely be put in place regardless of the status of a federal relief package. Lawmakers and Trump administration officials have touted the likelihood of federal farm relief, but a lengthy government shutdown has prevented a package from being finalized.

—Story by Dan Lemke

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*Export initiatives supported by United Soybean Board, Qualified State Soybean Boards, the U.S. Soybean Export Council and USDA Foreign Agricultural Service. Source: Kaiser, H.M. 2024. An Economic Analysis of the United Soybean Board and Qualified State Soybean Boards' Demand- and Supply-Enhancing Programs. Cornell University.

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