THE NORTH DAKOTA
Soybean
GROWER MAGAZINE

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INSIDE:
Potential Tariff Escalation PAGE 16

NCSRP: BUILDING BLOCKS OF SOYBEAN RESEARCH SUCCESS

SOYBEAN RESEARCH & INFORMATION NETWORK

AGRONOMIC EVOLUTION

Rutgers Agricultural College published the first soybean test results in 1879. Since then, an evolution of agronomic progress has taken production research from lab to greenhouse to small plots to on-farm, **allowing farmers to conduct real-world tests with their own equipment**.

TAG TEAM APPROACH

Collaborative soy checkoff investments in production research today leverage industry and academic partners. U.S. farmers see an average added value of $9.42 for every dollar invested. A **team approach delivers better understanding and application** of research results on the farm.

$9.42 ADDED VALUE

FUNDS FACILITATOR

The North Central Soybean Research Program (NCSRP) drives the research efficiency bus. The **multi-state collaborative effort focuses on enhancing and protecting soybean yield** through genetics and agronomic practices. Since 1992, NCSRP has funded $56 million in unduplicated practical applied research that accelerates and expands checkoff investment impact.

NCSRP REPRESENTS MORE THAN **85%** OF THE SOYBEANS PRODUCED IN THE U.S.

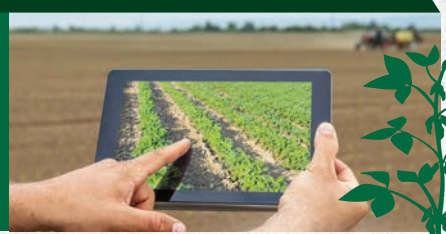
ON-FARM EFFICIENCY

On-farm research has been growing in the last two decades with technology. Farmers can easily test different agronomic practices with their own equipment and management practices.

For example, an integrated partnership with 53 replicated on-farm trials in seven states is benchmarking management practices across a wide range of conditions. In 2020, the NCSRP project found **better management netted an average 3.2 bushel per acre yield increase** and $31 additional profit. The research finds farmers can fine-tune planting date, maturity group, seeding rate, foliar fungicide and insecticide applications to yield more soybeans and profits.

FUTURE FRAMEWORK

Farmers should consider participating in local research networks to build on NCSRP work to better adapt to the economic and environmental challenges of future soybean production. NCSRP research is developing a **data framework that someday will be available for quicker analysis and decision** tools that provide farmers with more accurate, local recommendations.



Funded by the soybean checkoff

13 NCSRP MEMBER STATES REPRESENT MORE THAN **355,000 SOYBEAN FARMERS**

GET THE **411** ON SOYBEAN RESEARCH
SOYBEANRESEARCHINFO.COM

The Soybean Research and Information Network (SRIN) is a joint effort of the North Central Soybean Research Program and United Soybean Board. The online resource contains checkoff-funded soybean production challenge research findings with direct links to the respective underlying scientific studies housed in the National Soybean Checkoff Research Database.

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On the cover

Through trade team visits and educational courses at the Northern Crops Institute and NDSU Commodity Trading Room, North Dakota soybean farmers work to build a preference for the state's soybeans. Personal interactions and direct connections go a long way in building demand from markets the world over.

—Photos by NDSC and NCI staff

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Justin Sherlock of Dazey Elected as the North Dakota Soybean Growers Association President

The North Dakota Soybean Growers Association (NDSGA) held officer elections during a recent Board of Directors meeting. The NDSGA officers elected were President Justin Sherlock of Dazey and Treasurer Stephanie Cook of Davenport. The re-elected officers were Vice President Chris McDonald of Leonard and Secretary Joshua Stutrud of Barton.

Brad Thykeson of Portland, Josh Gackle of Kulm and Sherlock will continue to serve as the American Soybean Association representatives to provide a voice for North Dakota soybean producers regarding national farm policy. Gackle currently serves as the American Soybean Association's president.

The new officers started their term on July 1, 2024.

—Story and photos by staff

Justin Sherlock of Dazy, North Dakota was elected president of NDSGA.

Stephanie Cook of Davenport, North Dakota was elected treasurer of NDSGA.

Chris McDonald of Leonard, North Dakota was re-elected vice president of NDSGA.

Joshua Stutrud of Barton, North Dakota was re-elected secretary of NDSGA.

ASA Grower Leaders and Staff Met with EPA Officials During Summer Hill Visits

Several members of the American Soybean Association (ASA), including President Josh Gackle, Kulm, North Dakota, spent time at Environmental Protection Agency (EPA) talking about renewable fuels and other grower concerns.

"In the meeting, we stressed the need for availability and certainty of crop protection products, specifically related to a needed dicamba label registration for the 2025 growing season," said Gackle. "In the meeting regarding biofuels, growers asked EPA to build a robust biofuel Renewable Volume Obligation under the renewable fuels standard, and for guidance to enhance domestic feedstocks."

From left to right, American Soybean Association (ASA) Chairman Daryl Cates (IL); ASA President Josh Gackle, Kulm, North Dakota; ASA Vice President Caleb Ragland (KY); ASA Treasurer Dave Walton (IA); ASA Director of Government Affairs Alexa Combelic; and ASA CEO Stephen Censky.

Difficult Choices

If you're a regular reader of the North Dakota Soybean Grower Magazine, you may notice that there's a new face on this page. Recently, I had the honor of being elected by my fellow North Dakota Soybean Growers Association (NDSGA) board members to serve as your president for the coming year. This position is a tremendous honor, but it's also a huge responsibility and one that I will give my full effort.

I say that this role carries a huge responsibility for a reason because 2024 and 2025 have the potential to set the stage for some of the most defining issues affecting soybean growers for years to come. We are quickly entering the final stretch of the 2024 presidential election between President Joe Biden and former President Donald Trump. The election's outcome will have huge consequences for soybean growers because one candidate is promising to push ahead with decarbonizing fuel supply chains and addressing climate change while another candidate is pushing an America-first policy platform and promising tariffs to make American businesses more competitive than imported goods. Both candidates' key policy priority areas will affect the soybean market, whether it be in the form of increased use of soy oil to make lower-carbon fuels or whether it will be the effects on soybean exports if retaliatory tariffs are placed on U.S. soybeans.

Regardless of who wins the election, both candidates will potentially be faced with a new farm bill that could limit some of their abilities to adjust nutritional-program benefit levels or to offer farmers new ad-hoc trade payments if we enter a new trade war. Various farm bill proposals also remove the secretary of agriculture's ability to use Commodity Credit Corporation (CCC) funds to help support payments to farmers during a possible future trade war.

If those issues weren't enough, 2024 also saw the Environmental Protection Agency and the Treasury Department release rules that will influence the viability and long-term opportunities for soybeans to be used for biodiesel, renewable diesel and sustainable aviation fuel (SAF). Unfortunately, the news was not as good as we would have liked to see, with blending requirements substantially below what the market is currently providing and future tax credits for SAF made with soybean oil being substantially below the level that would likely encourage future development of that market opportunity for soybeans.

While many of these challenges may sound like things are doom and gloom, I assure you they are not. The opportunities and possibilities of what we can accomplish using soybeans are too numerous to quantify. The trick is making sure that farmers' voices are heard and that policy allows for new and exciting soybean use opportunities to develop while also maintaining or not damaging our traditional and existing soybean markets. Therefore, it's very important that you make sure you're a member of the NDSGA. You can count on the NDSGA to carry your message to elected officials here at home in North Dakota; in Washington, D.C.; and abroad, but we need your support and membership to help make sure we can do so. I encourage you to take a few minutes to go online or call the NDSGA office and to renew your membership or join for the first time if you are not a current member. That choice is easy.

Justin Sherlock
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Membership Application

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

Name: _____
Spouse: _____
Date of Birth: _____
Farm/Company Name: _____
Address: _____
City, State, Zip: _____
County: _____
Phone: _____
Cell: _____
Email Address: _____

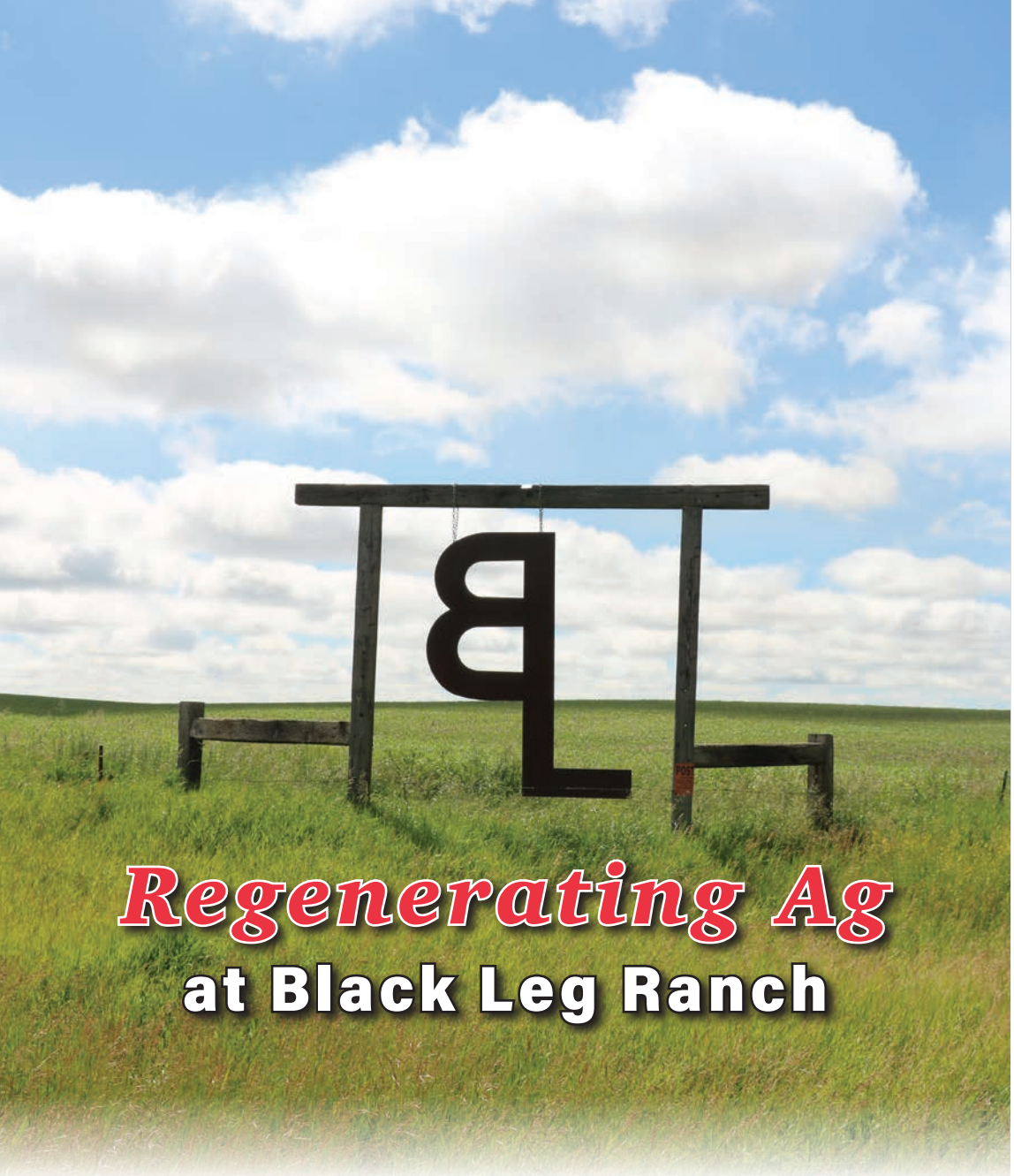
Occupation (Please check all that apply)
❑ Farmer ❑ Retired ❑ Agribusiness
❑ Finance ❑ Elevator ❑ Other

Do you raise: ❑ Cattle ❑ Hogs ❑ Poultry ❑ Dairy
Do you currently grow soybeans? ❑ Yes ❑ No
Soybean Acres: _____ Total Acres Farmed: _____

How did you hear about NDSGA? (Please circle one)
Recruited in person; Recruited by phone; Magazine;
Internet; Social Media; Mailing; Radio; Event; Other

❑ 3-Year Professional Membership: $250 ❑ Retired Farmer: $25
❑ 1-Year Professional Membership: $110 ❑ 1-Year Student: Free
❑ Check enclosed (please make checks payable to NDSGA)
❑ Credit Card: Visa / MasterCard / Discover / American Express
Card Number: _____
Expiration Date: _____/ _____ CVC: _____
Name on Card (Please print): _____
Signature: _____

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



Regenerating Ag at Black Leg Ranch

Jerry Doan's name is well known in many North Dakota agriculture circles because of his passion for holistic management and the regenerative techniques practiced on his family's Black Leg Ranch near McKenzie. The ranch has received notable recognition for its conservation efforts, including being named a National Environmental Stewardship Award Winner and being the recipient of North Dakota's first Leopold Award, which is named after famed conservationist Aldo Leopold.

As the fourth-generation Doan to farm the land southeast of Bismarck, Jerry Doan realized early in his farming career that something in the operation needed to change. Doan returned to the farm in the 1980s when the ag economy was struggling. He saw the farm's net worth eroding and knew he needed to do something different or risk losing the farm.

"I had just gotten out of college, and the guys that I had admired the most, the guys that I thought had it figured out, there's not one of them farming anymore," Doan recalls. "That made quite an impact."

Doan went through Allan Savory's Holistic Management. Doan describes how the course taught a lot about common sense.

"I look back at my grandfather who bought land for a dollar an acre in the Depression era, and people said he was crazy," Doan says. "He worked two jobs to keep from giving the farm away because he couldn't afford the tax. A lot of the things I learned in Holistic Management, I think he already knew, because he was an entrepreneur before anybody knew what that was, and he used nature to his benefit."

Grassland Focus

Doan started using practices to help rebuild the quality of the ranch's grasslands while also improving the cropland's soil quality.

"It was called sustainable, but I don't like the term 'sustainable.'" Doan explains. "Why would I want to sustain something that's been degraded? We have degraded our natural resources, our soil health and our grasslands."

Prior to settlement, healthy grasslands included huge roving herds of bison that would move through an area every couple of years. Black Leg Ranch utilizes the planned rotational grazing of its cattle to replicate the effects of the bison herds of old.

"All of a sudden, we have all this plant diversity coming back," Doan asserts. "It's high animal impact, short duration, long rest and recovery period, basically the same thing the buffalo did. Now, we're just having to do it with fencing and management. That's improved our grassland immensely."

Doan contends that the healthy grasslands have also helped improve the water quality.

Doan states that he had three goals when adopting regenerative ag practices. He wanted to improve soil health, cut winter cattle feeding costs and propagate wildlife.

"I'm happy to report that we've done all three," Doan confirms.

In addition to rotational grazing cattle, the Doan family plants cover crops on the cropland, utilizing as many as 25 different plants. Planting legumes and brassicas helps to pull nitrates from the soil and to open pores, allowing for water infiltration and supporting diverse soil biology. Once cash crops, including soybeans, are harvested, cattle graze the remaining cover crops. That grazing helps reduce winter feeding costs while also assisting with soil health.

"Our water quality is going up because we're keeping that manure and urine out on those fields, and what that's doing then is our biology's finally

Jerry Doan began working with regenerative ag because he wanted to improve and cut winter cattle feeding costs while also increasing wildlife.

coming back, and our soil health is improving," Doan says. "If you compare our soil that we've had multiple years in a rotation between cash crops and cover crops, our soil is porous, and the biology is huge. I think we're just scratching the surface on what we know about what happens under the ground with all the different little creatures."

Doan describes how, traditionally, tilled soil is often packed and blocky, forcing farmers to increase their inputs of fertilizer and chemicals just to keep the land productive.

"What used to be very productive, high producing, healthy soils are going to continue to decline at a drastic rate unless we start to do things a little smarter," Doan contends.

Diversity is Good

Doan states that he's not only a proponent of diversity in agriculture, but he's also an advocate for the value of grasslands. With broad discussions within agriculture about climate-smart practices and carbon sequestration, Doan believes that grasslands are an important part of the conversation.

"When I grew up, we always heard about how we're going to lose the rainforest and how we need to protect them," Doan recalls. "The grasslands probably do more for the climate than the rainforest, and yet we're allowing them to be taken away by urban sprawl or conversion to cropland. We need to pay attention to that."

Doan says that he's a firm believer in regenerative ag as well as the benefit to farmers, to water quality and to the climate.

"We don't have to get into a fight about whether or not you believe man is causing climate change, but agriculture can be the solution if we just incentivize it and allow it to happen, and we won't have to spend trillions of dollars to do it," Doan asserts.

Profitability and Fun

The challenging years of Doan's farming career not only led to him rethink the way he farmed, but also what the farm encompassed. Difficult economics, along with the loss of his father and a long-time hired hand, had Doan questioning why he would continue farming.

"I told my wife I've either got to do something different, or I'm going to quit. This isn't fun anymore," Doan explains. "Then, I got involved in regenerative ag and saw the progression."

The progression of Black Leg Ranch has grown to include direct meat sales, agritourism, a hunting and outfitting operation, a brewery and a wedding venue. The diverse operations within the ranch's umbrella have allowed Doan's three sons to return to the family business.

"Two of our main goals are bringing profitability back and improving our quality of life, and I think it's the two things that most of agriculture misses," Doan contends. "We have a tendency to keep doing what we're doing over and over, and then, we wonder why it doesn't work. But we can bring profitability back, be smart, build soil health and then protect our legacy for the next generation. That's a big deal to me, and I see a lot of places not being able to say that."

Doan frequently speaks to groups about Black Leg Ranch and the regenerative practices that it employs. He's often asked how to bring the next generation back to the farm. He describes how there has to be a reason for the next generation to come back to the farm.

"Kids today have a million opportunities. They are not going to go back to ag operation if it's all negative," Doan states. "It's got to be positive, and you've got to allow them to have room to grow. If we're going to keep farmland in the hands of family agriculture, which I 100% believe in, we better allow it to grow and let people spread their wings a little bit and do things differently. Create some excitement and get out of the way."

—Story and photos by Daniel Lemke

Doan says diversifying the family operation has allowed more of the family to get involved.

The Building Blocks of Trade

One of the most basic principles in the world of sales is to know your customer. Understanding what customers need, along with their concerns and their preferences, is vital to delivering what they want. That sales concept holds true whether you're marketing cars, the latest technological gizmo or soybeans.

While we may not always see it through that lens, we, as soybean farmers, are producing an important food product that is sought after around the world. However, we're also competing with other countries that are growing and exporting soybean products. It's important for us to set ourselves apart from competitors, so buyers think of us first when considering purchases.

The North Dakota Soybean Council (NDSC) works diligently to build a preference for soybeans that are grown in the state. We support efforts to connect with potential customers in a multitude of ways.

Recently, the NDSC supported the Soybean and Soybean Meal Procurement Course offered by the Northern Crops Institute (NCI). This class brought buyers from across the globe to North Dakota to learn the mechanics of purchasing soybeans and soybean meal. It featured 22 participants from the United States, Vietnam, Egypt, Turkey, Indonesia, Ecuador, Mexico, Uruguay, Colombia, Nigeria, Pakistan and Italy. See page 23 to learn more about this course.

As valuable as the classroom training was, visits to grain-handling facilities, elevators, and port facilities gave the potential customers a broader picture of how soybeans get from our fields to destinations around the world. Still, the most impactful part of this class, and for other trade teams that make their way through the state, may be the farm visits.

There is always tremendous interest from trade teams wanting to learn more about how we grow our soybeans, how the crop is handled, and our overall process from start to finish. Many times, when trade teams visit our farms, it's the first time most guests have been to a farm or have had the chance to meet the farmer who is growing the soybeans. Trade team members are often fascinated by the size of our equipment, the technology we use, and the efficiency with which we operate. As a farmer, I'm pleased to show them how we grow and care for our crops because we have a good story to tell.

In addition to hosting participants from the NCI course, I have had the opportunity to travel to Asia in order to promote North Dakota soybeans. Just as buyers coming to the U.S. want to know how we produce our soybeans, we, as soy suppliers, must understand our customers' needs.

Milo Braaten
Director
North Dakota Soybean Council
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Often, the best way to make those connections and to share information is through face-to-face conversations, whether at home or abroad.

If potential customers understand how we grow our soybeans and we understand their needs, we've, hopefully, laid the foundation for a mutually beneficial, long-lasting relationship.

Many Thanks!

At the end of June, the North Dakota Soybean Council (NDSC) bid farewell to Chris Brossart of Wolford. The NDSC proudly acknowledges Brossart for his dedicated 6 years of service on the board, including 2 years as chairman, where he provided steadfast leadership to shape the organization and to support North Dakota's soybean producers. The NDSC extends its gratitude to the Brossart family for their support throughout his tenure. Thank you, Chris, for your invaluable contributions! Pictured right: NDSC Executive Director Stephanie Sinner presents Brossart with an appreciation plaque for his service.

North Dakota Soybean Council Elects Executive Officers

Cass County Soybean Producer Jim Thompson Elected as Chairman

During the North Dakota Soybean Council's (NDSC) board meeting on June 20, Jim Thompson of Page was elected as the chairman. Thompson represents soybean farmers in District 4, Cass County, and he farms with his wife, Jennifer. The Thompsons farm soybeans, corn, wheat and dry beans. He serves as the chairman of Rich Township and the president of the Cass County Township Officers Association. He has a degree in aviation administration and business management from the University of North Dakota. Thompson also sits on the Soy Transportation Coalition's board on behalf of the NDSC.

"I am honored to be elected chairman and look forward to working with my fellow board members and staff in the year ahead," said Jim Thompson. The "NDSC's mission is to innovate to expand partnerships, markets and opportunities for the success of North Dakota soybean growers, which is as important today as it was when our organization was established."

The board has reelected Rob Rose of Wimbledon as the vice chairman. Rose, who represents soybean producers in Barnes County, farms alongside his wife, Dawn, and their son, Taylor. They grow soybeans, corn, wheat, barley and pinto beans on a fifth-generation centennial farm. Rob Rose is a member of the North Dakota Soybean Growers Association and has a degree in agricultural economics from North Dakota State University (NDSU). He also represents the NDSC at Clean Fuel Alliance America meetings.

Evan Montgomery of Grand Forks has been elected as the secretary. He represents soybean farmers in District 7: Grand Forks and Traill Counties. Montgomery's family farm has grown soybeans since the 1980s. He also helps with his family's livestock operation, including cows and a large horse boarding and training facility. Montgomery, an NDSU graduate with a degree in vocal performance, sings with the Grand Forks Master Chorale and his own vocal band. He is involved with the North Dakota Farm Bureau and the Brenna Township Board, and he currently serves as the vice president of the Grand Forks Master Chorale's board. Additionally, Montgomery represents the NDSC on the North Dakota Livestock Alliance's board.

Dallas Loff, a soybean producer from Wahpeton, was elected as the treasurer. Representing soybean producers in Richland County, Loff has been farming soybeans, corn and sugarbeets with his father and brother for over 20 years; they farm near Colfax. He has a bachelor's degree in crop and weed sciences from NDSU. Actively involved with his local community, Loff has served on the township and school boards, and he is currently the president of his local elevator board. He also represents the NDSC on the North Central Soybean Research Program's board.

—Story and photo by staff

From left to right: Jim Thompson, Page; Evan Montgomery, Grand Forks; Rob Rose, Wimbledon; and Dallas Loff, Wahpeton.

Workshop Offers Hands-on Lessons About Agriculture

Teachers often spend part of their summer learning new things that they can take back to their classrooms. Nearly two dozen middle and high school instructors from across North Dakota took part in Nourish the Future. The June event was sponsored by the North Dakota Soybean Council (NDSC), the United Soybean Board, the North Dakota Corn Utilization Council, and North Dakota Agriculture in the Classroom.

"Nourish the Future is a teacher program that is looking to help science teachers learn about the science of agriculture," says Jane Hunt, the Nourish the Future instructor. "A lot of teachers have never experienced agriculture, and we're getting farther and farther away from farming. For them to understand how much science there is in agriculture, it helps them to meet their objectives and do the things that they need to do in the classroom."

The workshop was especially geared toward environmental, chemistry and biology teachers as well as biotechnology instructors, engaging them in hands-on lessons that were focused on integrating the science of modern food production into their classrooms and career technical education programs. Workshop goals included investigating the influence of modern farming practices on soil and water systems; exploring the scientific basis of biotechnology uses in agriculture; understanding the effect of food production on environmental issues, sustainability, and nutrition around the world; and increasing awareness about industry careers.

Participants also made biofuels to understand how fuel production can mitigate climate effects and can increase energy independence.

Nearly two dozen North Dakota teachers took part in the Nourish the Future event, sponsored by the North Dakota Soybean Council.

Zack Bateson, Ph.D., (right) research scientist at National Agricultural Genotyping Center talked genetics and biotechnology with teachers.

The two-day workshop included making biodiesel and ethanol in the classroom; a trip to an ethanol plant; dinner with industry professionals and researchers; and activities surrounding biotechnology, water quality, soil health, populations, and plant science

Carie Moore, a farmer from Rocklake, recently earned her master's degree in agricultural education. She serves as an NDSC county representative and has previously attended the Nourish the Future event, which she found very helpful during her time in the classroom.

"I started coming to Nourish the Future last year to add another class, but also to see how I, as a farmer, could bring agriculture into the classroom," Moore explains. "When I student taught, I used probably 3 or 4 different lessons that were part of this program and available on the website as well."

The NDSC has supported the Nourish the Future workshop for several years.

"We hope teachers can apply the engaging, hands-on lessons they learned into their curriculum in the coming school year and beyond," says Shireen Alemadi, NDSC's outreach and engagement director. "That's why sending them home with all the supplies they need to start incorporating the lessons right away in the fall is important to the Nourish the Future program."

For Moore, workshop participation had a double benefit.

"I'm glad to be back for a second year to serve as a bridge between teachers, education, and agriculture," Moore states. "I'm here to answer their questions directly from a farmer's perspective about the crops we grow. I hope to bring home new lessons and ideas to use as I begin teaching this year."

To learn more, visit nourishthefuture.org. North Dakota middle school and high school science teachers who are interested in participating in future workshops should email Shireen Alemadi at salemadi@ndsoybean.org.

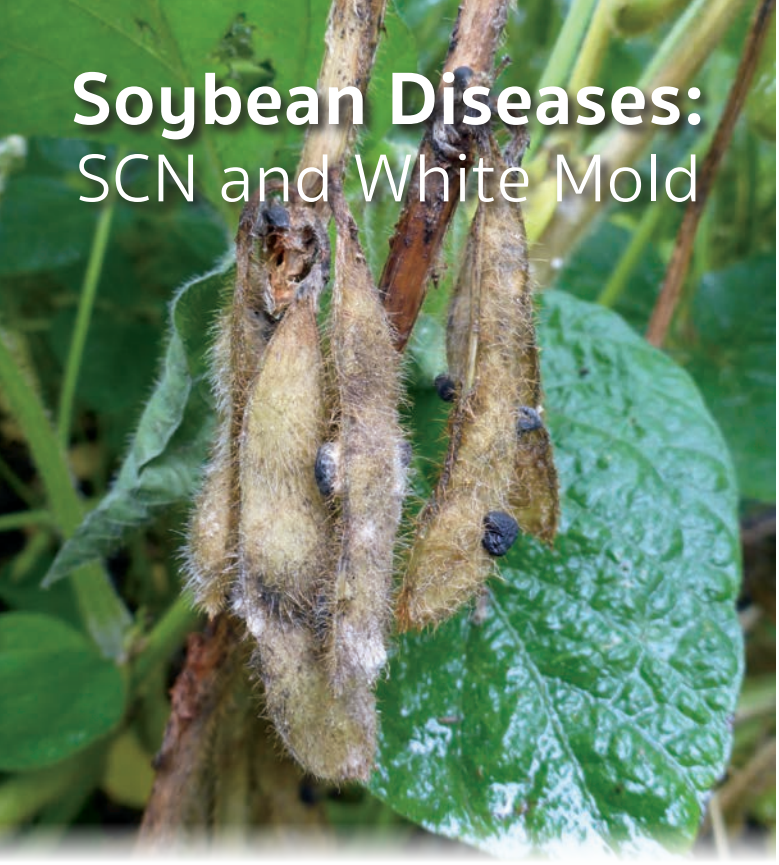
—Story by Daniel Lemke, photos by staff and courtesy of the North Dakota Corn Utilization Council

Nourish the Future participants learned about the many applications for soybeans and soybean products.

Recognition of Staff Service

During the North Dakota Soybean Council's (NDSC) board meeting on June 20, two work anniversaries were recognized. NDSC Director of Market Development Jena Bjertness (left) celebrated 3 years of service to farmers across the state while Shireen Alemadi (right), NDSC outreach and engagement director, also marked 3 years with the NDSC. Chairman Chris Brossart (middle) congratulated both Bjertness and Alemadi, presenting them with appreciation plaques.

Soybean Diseases: SCN and White Mold



The threat of SCN is increasing in North Dakota, according to 2023 SCN sampling results. Soybean Cyst Nematode (SCN) remains the most damaging pest that U.S. soybean farmers face. The tiny soilborne parasite can sap as much as 30% of a plant's yield with no visible symptoms. For North Dakota soybean farmers, the threat is increasing.

Each year, the North Dakota Soybean Council (NDSC) offers free SCN testing for the state's farmers. Richard (Wade) Webster, Ph.D., a soybean pathology specialist at North Dakota State University (NDSU), reports receiving the highest number of positive samples in 2023.

Webster explains that while it can be challenging to quantify the impact of SCN on North Dakota farmers, the high number of positive tests and the elevated SCN egg counts in soil samples indicate a significant threat.

"I think that last year, in particular, was a bad year because it was very hot and very dry, which is conducive for SCN reproduction," Webster asserts. "Those conditions, along with more people testing and more awareness of this particular problem is why we're seeing these increased SCN counts across these samples."

Webster states that SCN is primarily an issue in eastern North Dakota, especially in the Red River Valley. However, positive samples have also been received from western North Dakota.

"We know it's out there, and it is getting moved to those new locations," Webster contends.

Because SCN is nearly impossible to eradicate, farmers have to better manage their fields. The best way to know if SCN is present is through soil testing. Webster says that the information gathered from a soil test not only lets farmers know if SCN is a problem, but they can also use the data to determine if management techniques are helping to reduce the number of SCN eggs found in the soil from year to year.

Soybeans in areas affected by extreme SCN populations may show stunting and some slight yellowing. However, substantial yield loss can take place without farmers even knowing.

"The pathogen needs the plant to survive, so it really doesn't want to kill it off," Webster explains. "It wants to keep that plant alive so that it can continue to pull in the food for each of these little worms. Plants will only start to show symptoms under very, very high pressure when those plants just cannot hang on any longer."

Webster recommends digging up a few roots to see if cysts are present on the soybean plant's roots.

SCN is best managed by planting soybean varieties with SCN resistance. The other option is crop rotation.

"Thankfully, SCN can only infect soybeans and dry beans, so we have a lot of other options for growers," Webster contends.

The NDSC is, once again, offering free SCN testing. NDSU Extension agents will have sample bags available in August. Interested farmers can get an envelope, collect soil samples from near the soybean root, and put the sample in the envelope. The samples are sent to Agvise Laboratories for analysis. Results are only shared with the sample submitter; researchers use the aggregate information to map the spread of SCN in the state.

Soil sampling is the best way to determine soybean cyst nematode (SCN) pressure. Free SCN testing is once again available to North Dakota farmers.

To learn more about the free SCN soil sampling program, scan the QR code.

A White Mold Issue

White mold is another important soybean disease that affects fields across the state. Webster asserts that white mold is inconsistent because the pathogen needs very specific environmental conditions, including cool nights and consistent moisture. Cool and moist conditions at the time of flowering in early to late July are most conducive to the development of white mold.

"White mold inconsistently develops, but when it does, it can be quite devastating for a large number of growers in the state," Webster states.

The University of Wisconsin-Madison developed a smartphone app, Sporecaster, that takes weather data, runs an algorithm, and then pushes out a risk level for whether a farmer should make a fungicide application on that given day. Fungicide applications can be effective with staving off some of the damage caused by white mold. Applying those fungicides only when necessary is beneficial to farmers and the environment.

"Since it is such an inconsistent disease, some farmers may go out and spray for white mold every single year, and maybe two out of every five years, it is unnecessary to make these applications," Webster explains. "This tool helps try to eliminate those two applications, saving the money, saving putting the input into the environment so that farmers can be more profitable across their operation."

Sporecaster was originally developed for states east of North Dakota, so Webster describes how NDSU is working to validate whether Sporecaster's recommendations fit with conditions in North Dakota and when the threshold for fungicide applications exists.

"In preliminary work we did last year, we actually found a surprisingly high number of fields with high white mold levels, which gave us a lot of really good information and data. Currently, these white mold prediction models in a dryland setting tell you to spray at about a 40% threshold, but from the work that we've done, we say growers should make that application a little bit earlier than what this app is telling you, probably closer to 30%," Webster contends.

Webster says that researchers have also developed a separate tool called Field Prophet, which is designed to be a one-stop-shop for predictive tools and decision systems. Field Prophet includes a white mold decision tool for soybeans, with additional capabilities still being developed.

—Story by Daniel Lemke, photos by staff

Wade Webster, Ph.D., NDSU soybean pathology specialist and other researchers are developing tools to help farmers better understand disease pressures.

For more information on white mold from Wade Webster, scan the QR code.

Endres Acknowledged for His Contributions to the Soybean Industry

At its June 20 board meeting in Fargo, the North Dakota Soybean Council (NDSC) honored Greg Endres as he retired from his role as a cropping systems specialist at the Carrington Research Extension Center. For more than four decades, Endres' dedication and expertise had a significant influence on North Dakota soybean farmers and the industry through his committed research efforts.

Pictured right, NDSC Chairman Chris Brossart congratulates Endres (left) on behalf of the NDSC, presenting Endres with an appreciation plaque.

Should Farmers Use Desiccant to Dry Down Soybeans in the Northern Growing Region?

Farmers grow soybeans in many parts of the United States, but varied growing seasons and weather conditions mean that producers raise those soybeans using different management techniques.

For many years, farmers in southern states have struggled to get their soybeans to mature properly. Because of warm conditions, the fields may not receive a killing frost until very late in the growing season, so soybean plants stay alive and green without adding any yield. The longer that the plants stay green, the more they are pressured by soybean diseases.

In many cases, farmers in the South use harvest aids or desiccants to even out the maturation. Applying a desiccant to kill the soybean plant allows farmers to better manage harvest.

"This practice not only allows farmers to terminate the crop, achieve uniform senescence, and minimize losses from diseases and other issues, but it also helps control late-season weeds," says University of Minnesota Extension Soybean Agronomist Seth Naeve, Ph.D.

Naeve states that, in recent years, farmers in northern climates have wondered if desiccating the crop to even out maturity also made sense for them. Naeve describes how some growers have tried it on their own. However, northern-grown soybeans respond differently to extended growing conditions than crops produced in the South.

Naeve maintains that research has shown how soybean plants in the North tend to put on yield all the way to the end.

"Every day you have green tissue and green leaves or green pods, those plants are continuing to do something, and they're actually adding some yield," Naeve explains. "Even though we call R7 (reproductive stage 7) physiological maturity, we've seen in our research that the plant probably accumulates some yield after that stage."

Naeve is one of more than 20 university Extension soybean researchers across the country who collaborated and shared research through a program called Science for Success. Naeve and several other researchers conducted trials using the same protocols to determine if desiccating soybeans made sense for farmers in various locations across the nation. Researchers focused on yield effects.

Soybeans were sprayed at the R6 stage, which is when there are full-sized seeds in the pod. Naeve said that killing plants at that stage resulted in a significant yield loss in his trials located in Minnesota. Spraying plants at R6.5, which is typically when farmers in the South desiccate, resulted in less yield loss.

Although the studies didn't focus on harvest timing, Naeve asserted that his research showed how there wasn't much gained by trying to kill the plant.

"At the end of the year in the North, we get a lot of environmental pressure that pushes the soybeans to naturally mature," Naeve contends. "By the time we get to R6.5 or so, the plants have already dropped most of their leaves and are unable to take up the herbicide. As a result, we have a hard time killing the plant. When we do kill the plant, we end up reducing its ability to increase yield. The problem is that, if we're able to do anything, we're probably causing harm."

Naeve adds that, if farmers are past the point of being able to desiccant soybean plants with spray applications, the desiccants aren't doing much to help and are an unnecessary expense.

Another challenge for farmers thinking about desiccating soybeans is that most harvest aids have a pre-harvest interval on the label. It is the minimum amount of time between the last application of a pesticide and when the crop can be harvested. Farmers need to pay attention to pre-harvest intervals when applying desiccants.

Naeve says that the desiccation trials will be repeated in the 2024 growing season to gather more information.

"One year of data is not conclusive, but it supports what we've found in the past that desiccation is probably not a very good practice for farmers in the North," Naeve states. "There are ways that we could probably moderate it to help deal with some weed escapes at the very end of the year, but it's not going to be a practice that we recommend broadly."

—Story by Daniel Lemke, photo provided by Seth Naeve

University of Minnesota Extension Soybean Agronomist Seth Naeve, Ph.D., isn't convinced using desiccants is necessary on North Dakota soybeans.

To learn more about the research on the feasibility of soybean desiccant, scan the QR code.

NDSU Welcomes New Extension Cropping Systems Specialist

Victor Gomes, Ph.D.

Victor Gomes', Ph.D., roots may originate half a world from North Dakota, but the new North Dakota State University (NDSU) Extension cropping systems specialist is finding a lot of similarities between his native Brazil and his new home. Gomes is based at NDSU's Dickinson Research Extension Center.

"I grew up in northeast Brazil, a much more tropical place than here, but one that shares a lot in common with southwest North Dakota," Gomes says. "It is also a semiarid region with a prevalence of dryland agriculture. Despite the differences in climate and landscape, the agricultural challenges and experiences have a surprising amount of overlap."

Gomes earned a master's degree in plant science from the Federal Rural University of the Semi-arid (Brazil) and a Ph.D. in agronomy from the Federal University of Ceara (Brazil). Before he moved to North Dakota, he studied abroad for a year at Newcastle University in England, later becoming a visiting scholar and then a postdoctoral researcher at Ohio State University.

Gomes grew up in a rural part of Brazil. There were many farmers on his father's side of the family. That connection led to a fascination with the cycles of agriculture, which influenced his career choice.

"Observing the hard work and dedication that went into cultivating crops and the impact it had on our community sparked my interest in agriculture and Extension from a young age," Gomes explains.

When Gomes heard about the position at the NDSU, he did some research on the university and the community and thought it would be a good fit, so he applied.

"I could not be happier with that decision," Gomes asserts.

As an Extension specialist focusing on cropping systems, Gomes states that his primary focus is to conduct applied research and to provide stakeholders with science-based solutions to improve their operations in the face of a more unpredictable climate.

"My program will focus on improving the resiliency of agronomic crop production systems while optimizing cost-efficiency and reducing environmental risk as the climate changes," Gomes says. "This will directly benefit North Dakota farmers by helping them adapt to changing climate conditions, enhancing their productivity and profitability, and ensuring the sustainability of their operations for the long term."

Gomes started his job with NDSU in May, so he's focusing on familiarizing himself with people in the agriculture industry and the issues that they face.

"I am most looking forward to connecting with farmers, industry professionals, crop consultants, and rural communities," Gomes contends. "Building these connections will help me gain a deeper understanding of the challenges they face and (will) allow me to work collaboratively to develop and implement solutions that address their specific needs. This direct engagement and impact within the agricultural community are what I find most rewarding and fulfilling about this position."

—Story by Daniel Lemke, photo courtesy of Victor Gomes

Farmers face mounting pressures from a growing population, extreme weather challenges, supply chain disruption, and rising input costs, all while striving to balance production with sustainability in order to safeguard natural resources. The Soil and Water Outcomes Fund (SWOF) is working to bring more value to farmers by incentivizing the adoption of conservation practices.

Cultivating Conservation

Healthy soils are the foundation of productive farmland and farm viability, and farmers are always learning and experimenting to reduce inputs, to increase outputs and to drive incremental value. On-farm conservation practices help reduce erosion, mitigate the effects of drought, enhance nutrient cycling, and more. If farmers are considering a conservation practice or want to scale their efforts, this innovative program offers a great opportunity to balance sustainability efforts with efficient crop production.

Rather than pay-for-practice, the Soil and Water Outcomes Fund (SWOF) utilizes a suite of industry-recognized models to quantify multiple environmental outcomes. The more positive environmental outcomes farmers create, the more they can earn. Farmers enrolled in the program implement conservation practices such as reduced tillage, cover crops, extended crop rotations and fertilizer management.

Because the program is out come-based, it is a great fit for producers looking to get started. SWOF allows farmers to scale conservation efforts at their own pace. Reducing tillage is a great example of conservation efforts. For those not quite ready for no-

—Story continued on page 20

Potential Tariff Escalation: *Harmful to the State's Soy Industry*

North Dakota farmers have firsthand experience dealing with the fallout from trade disputes spurred by tariffs. In 2018, then-President Donald Trump imposed tariffs on some products from China, which prompted the Chinese government to retaliate with its own tariffs, including on U.S. soybeans. In 2018, U.S. farmers' soybean exports to China declined by 75%, according to the U.S. International Trade Commission. The administration spent $28 billion reimbursing farmers for the damages.

While some of the most problematic trade issues with China have been mitigated, U.S. lawmakers have expressed concern about unfair trade practices and national-security issues related to products imported from China. Some leaders have renewed their calls to revoke China's Permanent Normal Trade Relations (PNTR) status, which would eventually raise import tariffs. The Biden administration instated new tariffs on Chinese products in May 2024, and presidential hopefuls have promoted the objective of imposing even larger and more broad import tariffs on a suite of Chinese products.

North Dakota State University Associate Professor and Director for Agricultural Policy and Trade Studies Sandro Steinbach, Dr. Sc., has undertaken an analysis of the effects for three major proposed policy changes. The study's purpose was to estimate the changes for the forecasted 2025 exports of soybeans and soybean meal in the event of a freshly flaring trade dispute between the U.S. and China.

Steinbach and his colleagues considered three different scenarios. summarized in Table 1 and described in detail afterward.

Table 1 Study's Trade Policy Scenarios

Scenarios	U.S. Action	Expected Chinese Response	Rest of the World's Response
Scenario 1	The Executive Branch imposes a 17.5% to 75% import tariff increase on steel, aluminum, semiconductors, electric vehicles and other products.	20% import tariff increase on all U.S. agricultural products	None
Scenario 2a	The Executive Branch imposes a 10% tariff increase on products from all countries.	10% import tariff increase on all U.S. products	10% import tariff increase for all U.S. products
Scenario 2b	The Executive Branch imposes a 60% tariff increase on Chinese products; and a 10% tariff increase on products from all countries.	60% import tariff increase on all U.S. products	10% import tariff increase for all U.S. products
Scenario 3	U.S. Congress revokes China's PNTR status and thus raises the average import tariff on Chinese agricultural products by 9.5%.	9.5% import tariff increase on all U.S. agricultural products	None

Note. The table describes the three possible scenarios, with the second having a sub-scenario where the U.S. imposes tariff hikes on Chinese goods and goods from all countries. Based on historical actions from the Chinese and foreign governments, we assume there will be tit-for-tat retaliations on U.S. agricultural exports.

Scenario 1:

In June 2024, the Biden administration announced new tariffs on Chinese products. The proposed increases would be applied to imported steel and aluminum, legacy semiconductors, electric vehicles and more. These tariffs range from 17.5% to 75% and will be applied for 2 years. China has already voiced retaliatory responses to these tariffs. Under this scenario, the researchers assumed that China's response to the proposed hikes would be a 20% tariff increase for all agricultural products.

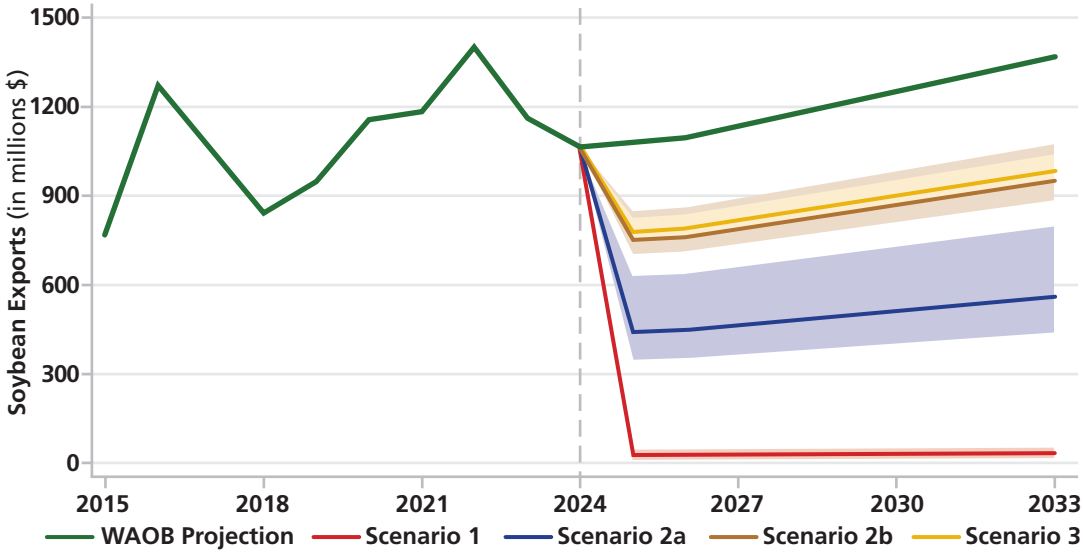
Scenario 2:

In this scenario, the researchers assumed a gradual adjustment of U.S. tariffs on Chinese products, like what occurred between 2018 and 2021. As with the previous scenario, these tariff hikes would also entail executive actions from The White House. This analysis included two sub-scenarios. Scenario 2.a assumes that the U.S. increases import tariffs for all countries, including China, by 10%. As a response, all importing countries raise tariffs on U.S. exports by 10%. In the second sub-scenario, Scenario 2.b, the U.S. increases its import tariffs on Chinese products by 60% and for all remaining countries by 10%. As a result of this action, China would increase tariffs on U.S. exports by 60%, and all the remaining countries would retaliate with their own 10% tariffs on U.S. exports.

Scenario 3:

The third scenario assumes an action coming from the U.S. Congress. The U.S. House Committee on the Chinese Communist Party suggests countering the perceived economic and security threats with aggressive U.S. trade policy changes aimed at China. The committee recommends discontinuing the PNTR status, which allows China to trade with the U.S. at lower tariff rates following the World Trade Organization (WTO) agreement.

Figure 1 Projected Long-Run Trends for North Dakota Soybean Exports Under All Scenarios



Note. The figure shows the projected trends of North Dakota soybean exports from 2025 to 2033, comparing the World Agricultural Supply and Demand Estimates (WASDE) projections from World Agricultural Outlook Board (WAOB) (2023) with the scenarios considered in this analysis. Scenario 1 considers a 20% retaliatory tariff increase from China. Scenario 2.a considers a 10% retaliatory tariff increase from all countries. Scenario 2.b considers a more severe scenario with a 60% retaliatory tariff increase from China and a 10% increase from all other countries. Scenario 3 assumes a 9.5% retaliatory tariff increase from China. Estimates are based on our calculations.

Implementing the proposal elevates tariffs on all Chinese imports. The study assumes a reciprocal trade response from China, meaning that China would raise its import tariffs on inbound U.S. agricultural products by 9.5%.

Potential Impacts

Under a scenario where China retaliates with a 20% tariff increase on U.S. soybeans (Scenario 1), North Dakota soybean exports could decrease by 59.1%, amounting to a trade loss of approximately $639.9 million. Nationally, this policy shift translates to a 32.4% reduction in soybean exports. If all countries impose a 10% tariff increase on U.S. exports (Scenario 2.a), North Dakota soybean exports will decrease by 30.6%, or $331.2 million.

In severe Scenario 2.b, with a 60% tariff increase from China and 10% from other countries, North Dakota soybean exports could plummet by 97.6%, resulting in a $1.1 billion loss. Revoking China's PNTR status, resulting in a 9.5% increase for tariffs, could lead to a 28.1% reduction for North Dakota soybean exports, amounting to a $304.0 million loss.

North Dakota soybean prices could drop by up to 6.3% under the 20%-tariff-increase scenario, translating to a reduction of $0.65 per bushel. A 10% global tariff increase could decrease North Dakota soybean prices by 3.2%, equivalent to a loss of $0.32 per bushel. With a 60% Chinese tariff increase, soybean prices in the state could fall by 19.0%, resulting in a $1.94 per bushel reduction. Revoking PNTR status could lead to a 3.0% price decrease, translating to a $0.31 per bushel loss in North Dakota.

Under the 20% tariff scenario, North Dakota soybean farmers could see a revenue decrease of at least 7.5%, equivalent to $172.2 million. A 10% global tariff increase could reduce the state's soybean revenue by 3.8%, or $86.1 million. With the 60%-Chinese-tariff-increase scenario, North Dakota soybean revenue could drop by 22.5%, amounting to a $516.7 million loss. Revoking PNTR status could lead to a decrease for North Dakota soybean revenue, equivalent to $81.8 million.

Under all scenarios, Brazil will likely increase its soybean exports to China in response to reduced U.S. exports. Depending on the severity of the retaliatory response, Brazilian exports to China could increase by up to 33.6%. This displacement of U.S. exports by Brazilian soybeans in the Chinese market could further exacerbate the negative effect on the state's soy industry.

The projected losses for soybean and soybean meal exports, as well as prices, due to retaliatory tariffs would significantly affect North Dakota's agribusiness sector. The study's estimates suggest that under the mildest scenario (Scenario 3), soybean farm revenue could decrease by as much as 15.2% or $332.6 million. These changes could cause disruptions in the soybean value chain if they are not addressed properly with compensatory payments to soybean farmers.

—Story by Daniel Lemke, photo by staff, charts courtesy of NDSU

Natural Resources Trust Focused on LAND CONSERVATION

Nearly 40 years ago, the North Dakota Natural Resources Trust was born from the conflict about how to address the Garrison Diversion Project's effect on the state's wetlands. Originally called the Wetlands Trust, the organization's name and mission were changed in 2000 when the Dakota Water Resources Act was passed.

"That's when our mission was broadened to include grasslands, riparian areas, essentially all natural resource components," says Natural Resources Trust Executive Director Keith Trego.

The Natural Resources Trust's mission is to promote the retention, restoration and creation of wildlife-friendly management of wetlands, grasslands and riparian areas. Trego explains that the organization's work ranges from public policy to connecting with individual producers regarding restoration, grass planting and grazing systems.

"We're very focused on the voluntary private land conservation," Trego states.

Trego describes how the Natural Resources Trust provides various cost-share and incentive programs. As a nonprofit organization, the Natural Resources Trust can be nimble and customize programs that work for individual farmers or ranchers. The Natural Resources Trust can provide cost sharing for things such as grass seeding and grazing systems.

"We've done a lot of work over the years promoting no-till or conservation-tillage agriculture with soil conservation districts," Trego asserts. "We can provide incentive programs for CRP (Conservation Reserve Program) enrollment or other farm bill programs."

While many of the organization's efforts are tied to grasslands, Trego maintains that the Natural Resources Trust is open to more opportunities to work with farmers involved with production agriculture.

"As you get to the eastern end of the state, there aren't as many conservation opportunities," Trego explains. "You have to search a little harder, but if you look hard enough, there's almost always something that will benefit an operation, some land that doesn't fit the production mode as well, or areas where you can improve water quality issues or reduce movement of nutrients off the landscape."

Trego says that potential projects which landowners could have with the Natural Resources Trust might involve returning marginal pieces of cropland back to grass. Farmers could use that land for grazing and potentially get cost-share assistance to help with a watering system.

The Natural Resources Trust is part of the Meadowlark Initiative, which provides landowners with a one-stop-shop for programs and practices available through various private, state and federal conservation partners to help establish and manage diverse native perennial grasses, to install grazing infrastructure and to develop working grasslands for sustainable livestock grazing.

With the increased promotion of climate-smart agriculture programs, the Natural Resources Trust is involved with a large project to monitor and to analyze the carbon uptake of grasslands

Keith Trego is executive director of the North Dakota Natural Resources Trust.

with a managed grazing regime. (See the sidebar article below.)

The Natural Resources Trust may be focused on grasslands, but Trego states that there are opportunities for crop producers to connect with the organization as well.

"We're very involved in anything related to soil health and sustainability," Trego contends.

Trego encourages farmers who may have potential restoration sites on their farms to contact the Natural Resources Trust to discuss the possibilities.

"We want to help people figure out what works best for them on their land, whatever kind of operation they have, whatever geography they're in," Trego asserts. "There's always room for some improvements in natural resource management, even if it's just a few acres here and there. There's so much interest in sustainability, carbon storage and pollinator habitat. There's just so many ways that we can help producers improve their bottom line and make things better."

Learn more about the North Dakota Natural Resources Trust and its programs at ndnrt.com.

—Story and photos by Daniel Lemke

Natural Carbon Capture in Grasslands

Lewis Heaton raises soybeans, corn and wheat on his land in Burleigh County, north of McKenzie. He also has a cow-calf operation. Inside one of his pastures, which is divided into paddocks, is an array of sophisticated monitoring equipment that is gathering data around the clock to quantify how grazing management affects natural carbon dioxide capture and carbon sequestration on rangelands.

"I've been into rotational grazing for quite a while, and I can see the benefits of it," Heaton says. "When the carbon part came into the picture, probably 4 or 5 years ago, I was interested in knowing how much carbon we can sequester in rangeland. This project will help us quantify how much that is."

Researcher Rebecca Phillips, Ph.D., checks some of the sophisticated monitoring equipment gathering carbon emissions data.

The Heaton Ranch is part of a rangeland carbon capture project. The study is funded through a $500,000 Oil and Gas Research Fund grant awarded by the North Dakota Industrial Commission, along with funding from the North Dakota Natural Resources Trust as project lead, the McKenzie County Soil Conservation District, the North Dakota Game and Fish Department, and the National Fish and Wildlife Foundation. Researchers theorize that grazing management will increase forage production as well as the net uptake of atmospheric carbon dioxide. The North Dakota rangeland project is one of the few studies taking place with a working, ranch-sized herd.

The equipment setup is called an eddy covariance system, where the fluxes of carbon dioxide from the atmosphere into the ecosystem are measured at a pasture scale. The project tracks forage production, forage removal and pasture recovery to develop an annual carbon balance for grazed and idle pastures.

"Previous work has already shown that grasslands are really important carbon sinks in terms of sequestering excess carbon dioxide in the atmosphere," explains Rebecca Phillips, Ph.D., executive director of Ecological Insights and the principal investigator for the rangeland project. "Worldwide, they (grasslands) are more effective at sequestering excess carbon dioxide than forests. We know this because of the way deep-rooted rangeland systems allocate resources below ground and their relationships with soil microbes. Rangelands are physiologically adapted to store reserves below ground to survive drought."

Phillips describes how the project is determining how much carbon is moving into the ecosystem as well as how much moves out on a daily basis and how the grazers are affecting that process compared to an idle pasture. Cattle graze on the various paddocks for a period of time before they're moved to another section within the pasture, and the previous paddock is allowed to recover.

"You can see the impact that grazing effect has on the carbon uptake for the entire ecosystem," Phillips states. "When it recovers several weeks later, you can see that recovery in the data with greater amounts of carbon moving into the ecosystem. In terms of the carbon fluxes, we're really able to track our management effects."

The monitoring project got underway in 2023 and is expected to run through at least next year. The longer the site is operational, the more robust the data are. Phillips contends that information could be applied to model other grasslands.

Among the rangeland carbon capture project's goals is to demonstrate the value of grazing management on the rates of natural carbon dioxide capture to carbon buyers and sellers.

Heaton explains how that aim was one of the reasons he was interested in hosting the research project on his land.

"I've been interested in the business side of it," Heaton says. "There is a market for carbon contracts, and I've looked at some of them, but I haven't done anything yet."

Heaton contends that some of his grasslands could easily be converted to cropland, but knowing the value of the carbon which the grasses sequester could increase their profitability.

"I'm looking for ways to make it financially equal," Heaton asserts.

More information about the project can be found at ecologicalinsights.org/ogr.

The multi-year carbon emissions project is one of few to be conducted studying rotational grazing on a working ranch.

New Directors Elected to the North Dakota Soybean Council

The North Dakota Soybean Council (NDSC) recently welcomed two new directors to its board, with their official terms beginning on July 1, 2024.

Jeremiah Undem, a soybean farmer from Oakes, was elected to the NDSC, where he represents soybean producers in District 3, covering LaMoure and Dickey Counties. His farm, now in its fifth generation, grows soybeans and corn, and occasionally wheat and rye. Undem practices minimum till/strip-till methods, placing a strong emphasis on soil health. A graduate of North Dakota State University (NDSU) with degrees in landscape architecture and environmental design, Undem is active in his community. His business is a member of the Oakes Chambers of Commerce, and Undem serves on the board of his local church. He has also held positions on the board of the Oakes Golf Course. Undem and his wife, Rebecca, have three children. In his leisure time, he enjoys golfing, fishing, and hunting.

"I am honored to be elected to the North Dakota Soybean Council," Undem, says. "I'm eager to learn and contribute to the investment of our checkoff dollars to benefit all North Dakota soybean farmers."

Soybean producer Philip Neubauer of Bottineau was elected to represent District 11, which consists of 13 counties in northwest North Dakota. Neubauer produces soybeans, barley, durum, spring wheat, and canola on his fifth-generation family farm with his brother, Tyler. He holds a bachelor's degree in crop and weed sciences from NDSU. Neubauer has been involved with his county ag crop improvement association, Bottineau County Farmers Union board, and North Dakota Farmers Union. In his spare time, he enjoys hunting, snowmobiling, golfing, and traveling.

"It's always important to continue learning, and I think there's a lot that I can learn on the North Dakota Soybean Council," Neubauer asserts. "I look forward to working with farmers from around the state to help the soybean industry grow."

JP Lueck of Spiritwood, North Dakota, was reelected to represent the soybean producers of District 6, Stutsman County. Lueck farms north of Spiritwood, with his dad and brother, growing soybeans, wheat and corn. He also serves as an engineering services manager at Collins Aerospace in Jamestown and has a degree in business administration from University of Jamestown. Lueck is involved with the North Dakota Farmers Union and is a township supervisor for Rose Township. He also represents the NDSC at meetings of the Specialty Soya Grains Alliance.

Jim Thompson, a soybean farmer from Page, was reelected to represent District 4, Cass County. Thompson farms soybeans, corn, wheat and dry beans with his wife, Jennifer. He serves as the chairman of Rich Township and the president of the Cass County Township Officers Association. He has a degree in aviation administration and business management from the University of North Dakota. Additionally, Thompson represents the NDSC on the Soy Transportation Coalition's board.

"We are pleased to welcome Philip and Jeremiah to the board," states Stephanie Sinner, executive director of the NDSC. "We look forward to collaborating with them as they represent their fellow North Dakota soybean producers. We also congratulate JP and Jim on their reelection to the board. All four members will contribute valuable expertise and perspectives to the North Dakota Soybean Council."

—Story and photos by staff

Phillip Neubauer

Jeremiah Undem

—Story continued from page 15

till farming, starting with strip-till or vertical-tillage techniques can still earn incentives for the positive environmental outcomes generated. For those already using no-till practices, adding a cover crop to some acres is a great option. Additionally, there are no acreage minimum or maximum requirements.

A Partnered Approach for Incentives

By leveraging markets for ecosystem services such as carbon and water, SWOF partners with public and private organizations to create significant farmer value. SWOF is an inset program that works with organizations to lower their emissions from supplies and farmers. This strategy can include reducing greenhouse gas emissions, improving water quality and increasing overall agricultural sustainability within their key supply sheds.

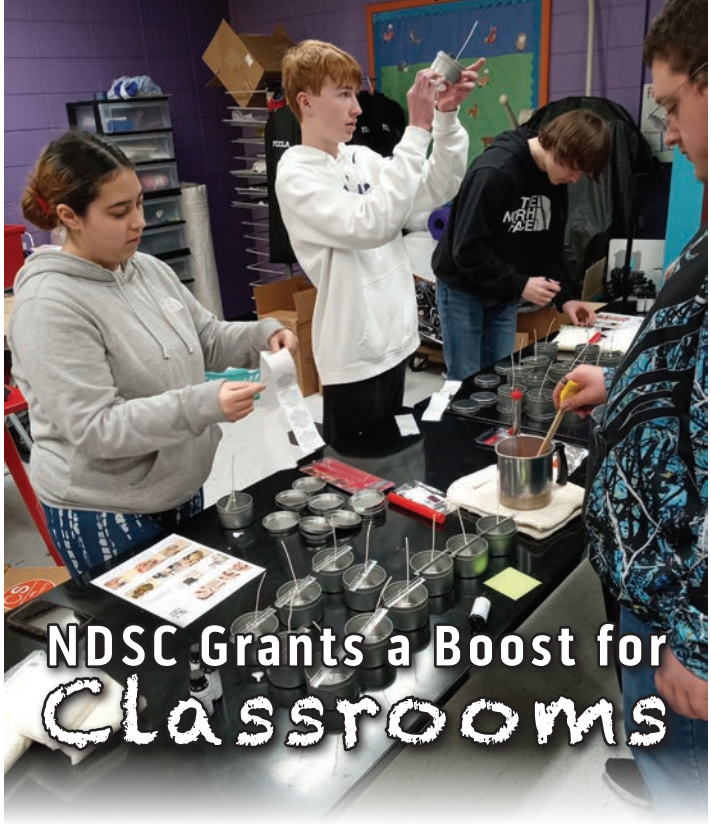
The Soil and Water Outcomes Fund is managed by AgOutcomes, a subsidiary of the Iowa Soybean Association. The program began in 2019 with a pilot project that had 9,000 acres of Iowa farmland. Now in its fifth year of farmer enrollment, SWOF has expanded farmer opportunities across several states through public and private partnerships, including the USDA's Partnerships for Climate-Smart Commodities initiative. In 2023, SWOF enrolled over 300,000 acres across 14 states and paid farmers over $10.5 million for their positive environmental outcomes.

"The Soil and Water Outcomes Fund helps to mitigate the risk associated with change. Their agronomy team is great to work with, and the outcome payments are made quickly after sign-up and verification." – participating SWOF farmer from the Red River Valley

Take the Next Step with SWOF's Key Benefits

The Soil and Water Outcomes Fund team understands that regenerative agriculture is a busy space right now. SWOF aims to

—Story continued on page 24



NDSC Grants a Boost for Classrooms

North Dakota teachers looking to enhance their classroom experiences can tap into a unique grant program that is offered by the North Dakota Soybean Council (NDSC). For the third school year, the NDSC is awarding grants of up to $500 to elementary, middle and high school teachers in order to support lessons related to soybeans or soy products.

"The program brings more connections to agriculture into the classroom while raising awareness about soybeans and how they impact our daily lives," says NDSC Outreach and Engagement Director Shireen Alemadi. "Another benefit is that we're supporting teachers by providing funds for them to acquire needed resources and supplies."

Alemadi states that qualifying activities or lesson plans incorporate soy in some way, whether it's related to plant development, food applications, renewable fuels or art.

"Some schools made soy crayons, and one did 3-D pen art, and the filament was soy-based," Alemadi explains. "If students are learning about soy, the possibilities are endless."

Alemadi describes how teachers have enjoyed adding new things linked to one of the largest crops in North Dakota to their curricula. Some participating teachers have noted how students continue to talk about what was learned with peers, other teachers and parents.

Cohl Ringler teaches in the Hankinson Public School District and was awarded an NDSC Education Mini-Grant. Ringler asserts that both he and his students enjoyed the soy-centered lessons.

"We did several activities," Ringler affirms. "We made crayons with soy wax and mica powder, and we made candles by mixing soy wax and beeswax with essential oils. Along with making scented candles, we made some soy wax melts to be used with a wax melter. I enjoyed it. They (lessons) weren't super complicated or hard to understand, yet they were useful and had end products that were able to go home with students."

"Opportunities such as the Educational Mini-Grant make learning experiences like the lip balm and candle labs possible," contends Heather Riemer, the agriculture teacher at South Prairie School in Minot. "This opportunity allowed us to purchase lab supplies, which will be able to be utilized in future labs as well. This grant will impact students for years to come. I have been a part of soybean production my entire life but never quite realized how many products contain soybeans. It was really fun to incorporate these labs in the classroom."

Anna Kemmer, who teaches at Southeast Region Career Technical Center in Oakes, recommends that other teachers take advantage of the program.

"Students learned about soy and wax production as a whole, and then, they got to make their own candle company for their candles," Kemmer says. "Without this grant, we would not have been able to afford our candle-making kits or have this lesson!"

Grants are limited and will be awarded on a first-come, first-served basis. Grants awarded for the 2024-2025 school year need to be used by April 30, 2025. There is a short, online application on the North Dakota Soybean Council website that teachers fill out, providing information about what lesson or activities they will be doing, a budget, their school information and their contact information.

—Story and by Daniel Lemke, photos courtesy of schools

To complete the online application, scan the QR code.

Teachers needing ideas or are looking for an already-developed lesson, scan the QR code.

North Dakota Soybean Council mini grants help bring soy to classrooms across the state.

NDSC and WISHH Build International Connections for U.S. Soy

The North Dakota Soybean Council's (NDSC) support of the American Soybean Association's World Initiative for Soy in Human Health (WISHH) program continues to spark international partnerships for U.S. soy, especially in Asian markets

In almost 30 countries, WISHH works with businesses that find value in creating early connections for sourcing U.S. soy. WISHH lays the groundwork in these new markets, positioning U.S. soybeans as first-of-choice for both animal feed and human foods. When Cambodian feed millers visited North Dakota this past spring, they received a high-level presentation about the value of U.S. soy through the Northen Crops Institute's (NCI) Essential Amino Acid customized short course.

With support from the NDSC, NCI's customized short course provided participants with a better understanding of the soy industry and, the important role U.S. soybean meal plays in animal nutrition. This spring's short course served as an extension of WISHH's successful trade mission to southeast Asia in Winter 2023, also supported by the North Dakota Soybean Council, which motivated Cambodian feed millers to make the trek to North Dakota in order to learn more about soy for animal feed. For businesses in Cambodia, using soybean meal for feed continues to grow as animal protein demand increases, and WISHH is making sure that these potential customers know where to find the best quality soy for their feed.

"Any time we can bring our business partners to the United States to see U.S. soy production up close, that offers us a big advantage," noted WISHH Asia Division Director Alan F. Poock. "All of the major Cambodian feed millers were on this trade team, and U.S. exporters appreciated the opportunity to meet and speak with them in one setting. Those type of connections created by the North Dakota Soybean Council are invaluable."

Poock explained how North Dakota is a leader in emphasizing the essential amino acids (EAA) offered by U.S. soy in northern soybean-producing states. Therefore, WISHH worked with NCI to create this customized EAA short course specifically for Cambodian visitors. The course taught feed millers who were sourcing soybean meal how to better place a value on U.S. meal when compared to the crop produced in other countries. The NCI short course emphasized this to both current and potential customers of U.S. soy while also highlighting the robust strength of the U.S. soy supply chain, particularly the transportation network and infrastructure. Participants received tours of a river barge loading terminal, a container loading facility, a shuttle-train loading elevator, and a BNSF transload yard. By funding these events, NDSC works with WISHH to showcase the industry's efficiency and scale: from production to global distribution.

"North Dakota farmers are investing their checkoff dollars for long-term business relationships in growing markets for U.S. soy," says Adam Redmann, NDSC director from St. Thomas and representative on WISHH's Program Committee. "WISHH continues to bring various trade teams to North Dakota to position the state's soy as the preferred choice internationally, particularly in Asian markets."

"North Dakota provided a great setting for this trade team," concluded Poock. "With the addition of two new crush plants, this trade team will help move the growing soybean meal supply to new customers."

To learn more about WISHH, visit wishh.org.

—Story and photos courtesy of WISHH

NCI's Soybean and Soybean Meal Procurement Course Visits Milo Braaten's Farm

The Northern Crops Institute (NCI) hosted its Soybean and Soybean Meal Procurement Course on May 13-21, 2024. The event featured presentations on cash and futures markets, alongside discussions on the complexity of the global soybean and soybean meal markets. Attendees also gained insights into the U.S. soybean and soybean meal handling and marketing systems, along with available risk-management tools to aid buyers in sourcing U.S. soybeans and soybean meal that meet quality requirements while maximizing value.

The course took place at NCI in Fargo, North Dakota, and in Portland, Oregon, in the U.S. Pacific Northwest (PNW). It attracted 22 participants from the United States, Vietnam, Egypt, Turkey, Indonesia, Ecuador, Mexico, Uruguay, Colombia, Nigeria, Pakistan, and Italy. This diverse group included international buyers from private trading companies, soybean processing, feed manufacturing, and food processing sectors. The course targeted participants with an intermediate to advanced level of knowledge and experience, made possible by support from the North Dakota Soybean Council and the South Dakota Soybean Checkoff.

Led by William Wilson, Ph.D., distinguished professor of AES Agribusiness and Applied Economics at North Dakota State University (NDSU), the program included lectures and hands-on exercises. Wilson, an expert in commodity futures trading, also consults for international agricultural commodity and food-processing industries. Apart from sessions at NCI, participants engaged in practical activities at the NDSU Commodity Training Room, a state-of-the-art facility within the Agribusiness and Applied Economics Department. This facility offers individual computer stations with live feeds of financial data, covering equities, credit, and various commodity markets including agriculture, energy, and biofuels.

In addition, the program included visits to the NCI Feed Production Center and a tour of the North Dakota Soybean Processors' Casselton soybean crush facility. Participants also visited the Alton Grain Terminal, an elevator and shuttle loading facility in Hillsboro, North Dakota, and toured the farm of Milo Braaten, director of the North Dakota Soybean Council, in Portland.

"The trade team was very interested in learning about our North Dakota soybean industry," says Braaten. "For many, it was their first visit to a farm and meeting the farmers who grow soybeans. They were impressed by the size of the equipment, the technology we use, and our operational efficiency. As a farmer, I'm proud to share how we sustainably grow and care for our crops."

—Story courtesy of NCI, photos by staff

Milo Braaten (center) answers questions from international visitors who participated in the NCI Soybean Meal Procurement course.

Good planting weather provided a good backdrop for Braaten to showcase modern farming practices.

STC Partners with Trucking Companies to Promote Soy-Based, Fifth-Wheel Lube Pads

Expanding soybean markets and improving the environment can come in small packages. Soybean farmers continue to pursue any opportunity to diversify markets for soybeans and soy products while meeting the growing imperative for environmental sustainability. A recent partnership between the Soy Transportation Coalition (STC) and trucking companies highlights how both objectives can be advanced simultaneously.

The STC conducted a promotional initiative that provided free samples of soy-based, fifth-wheel lubrication pads to trucking companies and farmers throughout the country. The pads are produced by Gear Head Lube, a Cedar Falls, Iowa, manufacturer of environmentally sustainable lubricants.

"These products have been in existence for several years, but given the STC's extensive relationships within the transportation sector, we concluded we could play a meaningful role in increasing the awareness and the utilization of these soy-based, fifth-wheel lube pads," explains Mike Steenhoek, executive director of the Soy Transportation Coalition. "Unfortunately, there can often be a significant delay between the development of an innovative and effective product and the widespread utilization of it. The STC's goal of this project has been to increase awareness and the motivation to use these soy-based, fifth-wheel lube pads so that the benefits can be more accelerated."

The square-shaped, soy-based, fifth-wheel pads are three by three inches in size and a half-inch thick. The application involves simply placing a pad, by hand, at both the nine and three o'clock positions on the fifth wheel. After the trailer is hooked up, the grease from the pads is evenly distributed around the fifth wheel with no mess. The pads, comprised of over 80% U.S. soy, are listed by the United States Department of Agriculture's Certified Biobased Product program.

The STC capitalized on its relationships within the trucking and agricultural sectors to widely distribute free samples of the pads for individual testing on both large and small truck fleets. Ruan, one of the largest family owned transportation management companies in the nation, partnered with the STC to evaluate the pads for the company's own fleet. The benefits of utilizing the pads quickly became apparent.

"These pads are very effective, easy to use, and affordable," says Mike Elliott, technical maintenance operations manager at Ruan. "As a product listed on the U.S. Department of Agriculture's Certified Biobased Product program, they are better for the environment. We look forward to expanding our usage of this product across the fleet in the future."

On average, a semi-truck consumes 20 pounds of fifth-wheel grease per year. With approximately three million semis operating in the country, the United States requires a total of 60 million pounds of fifth-wheel grease annually. Fifth-wheel grease is predominantly petroleum-based and is applied by hand; grease gun; or via small, plastic pouches that often become litter after application. Utilizing the soy-based pads has proven to be an environmentally sustainable alternative that is easier to apply while providing better lubrication over the entire fifth wheel.

"Farmers are always looking for opportunities to use products derived from the soybeans we grow," asserts Chris Brossart, a soybean farmer from Wolford, North Dakota, and the chairman of the Soy Transportation Coalition. "I have utilized the soy-based, fifth-wheel lube pads on the trucks at our family farming operation. They are incredibly easy to use and are very effective. Finally, they are a great example of how soy products continue to provide sustainable solutions for our environment."

To learn more about Gear Head Lube, visit gearheadlube.com. To learn more about the STC, please visit soytransportation.org.

—Story courtesy of the Soy Transportation Coalition, photo courtesy of Gear Head Lube

—Story continued from page 20

keep things simple and transparent. Here are a few key things to remember about the program:

- A lot can change from year to year. SWOF offers one-year contracts.
- You'll know exactly what you'll be paid. SWOF secures funding from partners and provides a payment offer to farmers prior to contract signing.
- Payments are made in two installments: 50% is paid prior to verification, and 50% is paid afterward.
- SWOF's North Dakota field program representative, Katie Nelson, is available for technical and agronomic support throughout your time in the program.

If you have questions or are interested in adding or expanding conservation practices for your acres, please reach out. Program enrollment is currently open across North Dakota for farmers looking to make practice changes in the fall of 2024 and/or spring of 2025. Visit the website, theoutcomesfund.com, to learn more and to sign up for an estimate. You can also email Katie Nelson at katie@agoutcomes.com.

—Story and photos courtesy of Soil and Water Outcomes Fund

Taking Precautions: Harvest Can be a Dangerous Time on the Farm

Angie Johnson, NDSU Extension farm and ranch safety coordinator, who farms with her parents near Galesburg, North Dakota, has been passionate about farm safety for a long time. When Johnson was growing up on the farm, her dad suffered a farm-related injury that had a huge influence on her life.

"When I was little, my dad was crushed by dual tractor tires while trying to remove them. At that time, calcium chloride was a popular liquid used to fill tractor tires to help the tractor gain more traction and weight. That meant the tractor tires were much heavier than had they just been filled with air," Johnson said. "My dad was lucky that he was not killed in that incident, but he had significant damage above his knee, where the tires applied crushing force."

The incident changed how Johnson's family farm operates today in many ways. Her family is always looking for ways to improve farm safety and to mitigate hazards on the farm.

Growing up in Galesburg, Johnson saw a lot of farm-related injuries and fatalities that affected the community. She remembered a neighbor who lost his life when he hit a culvert while sickle-mowing road ditches for hay.

"No job is worth losing your life over, including farming and ranching. An ag-related fatality can have a devastating impact on a community and a family," Johnson stated.

Some injuries may not lead to a fatality, but like her dad's case, they can lead to permanent disabilities.

A physical disability can sideline farmers and ranchers, leading to downtime and economic loss on the farm.

Farm safety is important for all generations and at all times of the year.

"I have seen many people get their hands crushed in a gate or suffer lifelong injuries from falling off a grain bin. It is those types of farm-related injuries that don't always make the news because it is not a fatality, but a lot of these types of injuries are actually a really big problem on farms and ranches," Johnson asserted.

These incidences, known in the farm safety world as "slips, trips and falls," can happen at any time on a farm or ranch, especially during busy times, such as harvesting.

During harvest, farmers are quickly unloading their grain from the semi-truck to the bin by auger and are hurrying to get back to the field as soon as possible.

This timeframe is when machinery entanglements, one of the leading causes of limb loss and even death on the farm, can happen.

"If you bend over an auger and a piece of clothing gets caught, you could become completely entangled in the auger's flighting. The auger will not stop rotating until someone is able to shut it off," Johnson stated. "The auger does not care how strong you are, as you will never win in an entanglement situation."

A positive tool that Johnson said can help with communication while working with grain bins, augers or other equipment on the farm or ranch is "Lockout/Tagout," which allows farmers to take ownership of their equipment's operation.

"It's a really powerful, yet simple, tool," Johnson claimed. "It gives farmers the power to shut things down without having someone turn the machine back on by installing a lock with a key or tag with a zip tie in case of a repair problem."

The tag alerts others that the auger or other pieces of equipment, including electrical power sources, have been shut down and that it is not safe to turn them back on until the original farmer has taken his lock or tag off.

"This can keep faulty equipment from being turned on during a repair, especially when working with other family members or employees on the farm. It can prevent someone from being injured or worse," Johnson contended.

Grain bins can be hazardous if precautions for preventing falls and entrapments are not taken.

Farmers will often spend weeks to months climbing grain bin ladders and checking on the condition of their grain during and after harvest.

"Inside that grain bin can be an entire year's worth of crop, waiting to be marketed at a valuable price. As farmers, we have to monitor grain condition constantly to ensure that it stays in good marketing condition to receive the best price possible," Johnson asserted.

When grain begins to spoil or succumb to insect damage, farmers can often take risks to enter a grain bin in order to break apart the chunks or crusts that form from the unconditioned grain to keep the grain flowing through the sump and auger systems.

"Oftentimes, we forget to protect ourselves first, which means we should not go inside the bin when there are unpredictable hazards present, such as entrapment or engulfment situations," Johnson declared. "We need to have a grain bin entrance and exit plan in place first; otherwise, it could be deadly."

There may be times when farmers have to climb up the bin ladder to open the bin.

"Use fall protection. I am a huge proponent of that. You can harness up and get some lifeline fall-protection gear on to help. It won't stop you from a fall, but it will stop you from completely falling all the way to the ground," Johnson said.

—Story continued on page 27

Soybean Harvest and Storage to Maintain Quality and Value

Farmers work an entire season to grow a quality soybean crop. Some of the growing season's final actions—combining and storing— have a major influence on the quality of the soybeans that farmers have to market.

Because soybeans can spend months in grain bins, proper care early in the harvest and storage process is important to maintain soybean quality.

Fall weather conditions can vary widely, which can influence the soybeans' moisture levels. Soybeans can absorb and lose moisture daily while they're in the pod, waiting to be harvested. Managing the harvest is the first step in maintaining soybean quality.

One characteristic of soybeans is that, given reasonable field conditions, they tend to dry down fairly quickly. Soybeans can have a 2%-3% moisture swing in a single day. Farmers might target harvesting soybeans at 13% moisture, only to find them down to 10% moisture shortly thereafter due to daily percentage moisture swings. As the soybeans get drier, they become much more fragile. Farmers should aim to harvest soybeans as close to 13% moisture as possible. If soybeans have dried below the optimal moisture levels, harvest timing can make a difference.

Harvesting in the morning when there's dew or higher atmospheric moisture can replenish some of the soybean moisture that gets lost during the day. Harvesting soybeans at the optimal moisture level is not only a soybean quality concern, but it also has an economic effect.

Running aeration fans periodically in the spring will keep stored grain cool.

Farmers get paid based on the pounds of beans delivered. Although it isn't exactly a one-to-one relationship, harvesting at 10% moisture instead of 13% results in 3% fewer soybeans to sell.

Just as grain is dried with bin fans, soybeans can be conditioned by operating fans during periods with the desired air temperature and relative humidity. Conditioning requires high airflow rates for several weeks using air with an average relative humidity of about 70%-75% to condition soybeans to 13% during normal fall temperatures of 30° F to 60° F.

Conditioning causes the beans to expand, which can damage the grain bin's bolted connections or even cause the bin to rupture from the increased pressure on the bin wall. The forces on the bin increase more rapidly than the percentage of the moisture content increases. Therefore, a moisture content increase of more than a couple of points can be problematic, and strategies to minimize the increased pressure should be practiced. The bin's warranty may be voided if damage occurs while conditioning grain.

Soybeans can trick grain moisture meters. The soybean's outside may be drier than the inside, resulting in an inaccurate moisture test. A recommended step is to put a soybean sample in a sealed bag for several hours at room temperature in order to allow the moisture to balance out and provide a more accurate reading.

If drying is needed, be aware that the process for drying soybeans is more complicated than drying corn. Drying has to take place at a lower temperature to prevent damage. Usually, commercial-grade soybeans need to be dried at 130 degrees or cooler, and food-grade soybeans at a temperature of only 10-20 degrees above the outside temperature. Because harvested soybeans often contain pods and other chaff, artificially drying soybeans does present a fire risk.

Keep the Bean Cool

Ambient temperature isn't typically a concern when harvesting, but soybean temperature while in storage is something that farmers need to manage. Soybeans should be cooled using aeration as outside temperatures drop. Whenever there is an average 10-to-15-degree temperature difference between the soybeans and the outdoor temperature, the aeration fan should be run to cool the soybeans.

Some farmers are concerned about running fans when the humidity is high because the practice might introduce more moisture into the stored beans. Growers should avoid running aeration fans when it's raining or foggy, but normally, aerating soybeans removes a small amount of moisture from the stored beans when cooling the beans.

Even though daily temperatures can vary widely during the months of September and October, the temperature of the stored soybeans does not fluctuate unless air moves through the bin. Run aeration fans initially to get a uniform temperature within the bin, and then as the average outdoor temperatures cool, run fans to bring the stored beans to near or just below freezing to preserve quality. Then, the goal is to keep the bin cool as we go into late winter and early spring.

Farmers need to do a thorough check of their stored soybeans at least every two weeks until the beans are cooled down for winter storage and, again, as outdoor temperatures warm. Use temperature cables to assist with monitoring the grain's temperature. Farmers should conduct at least one moisture check to ensure that the moisture content in the bin matches their expectations. Sensors and automation can assist with grain management, but those options do not eliminate the need for the farmer to know how to manage the grain and to monitor the grain and the equipment. Farmers must still check to make sure that the equipment is in calibration and that the grain is in good condition.

Long-Term Storage

Most North Dakota farmers used to sell many of their soybeans at harvest or by early spring. With the growing year-round demand for soybeans, farmers are encouraged to store soybeans later into the spring and summer in order to take advantage of marketing opportunities. The key to summer storage is for the soybeans' moisture content not to exceed 11%-12% and to keep the stored soybeans cool. Cover the aeration fans to prevent warm air from entering the bin, and exhausting the heat from the top of the bin.

—Story courtesy of Kenneth Hellevang, Ph.D., photo courtesy of NDSU

For more information on grain drying and storage, scan the QR code.

After 44 Years, NDSU Extension Engineer Ken Hellevang Retires

Ken Hellevang, Ph.D., retired from North Dakota State University (NDSU) on May 31 after joining the institution in 1980. During his tenure, he specialized in providing education and technical support for grain drying and storage, energy-efficient structures, indoor environmental engineering for moisture and mold, and flood preparation and recovery. His extensive expertise benefitted farmers, residents, agribusinesses, and professionals not only in North Dakota, but also across the United States and internationally.

On May 21, a farewell reception for Hellevang was held at NDSU. North Dakota Soybean Council (NDSC) Director of Agronomy and Research Miki Miheguli (right) congratulated him on behalf of the NDSC and North Dakota's soybean farmers.

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The Class III harnesses that farmers wear to climb up the ladder need to fit properly, and the farmer entering the grain bin needs to have the harness secured to the outside of the bin.

"Investing in safety equipment can make the difference between life and death," Johnson explained. "There is a really neat safety-type product out there that is a series of cables and pulleys that allow you to connect yourself to a Class III harness with the fall protection line on it."

On her family's farm, Johnson has added new lids to the grain bins that can be opened from the ground so that she doesn't need to climb on a ladder to open the lid.

"On our hopper bins, we have actually installed ground opening lids, which means we can stand on the ground and pull a cable system that opens the lid without us having to climb up and actually open that lid," Johnson stated. "When I need to close that lid, I simply stay standing on the ground and pull the cable back. The lid unlocks, and it allows me to close that lid while still standing on the ground."

For ladders, Johnson described how installing a spiral staircase system around your grain bin is better than a straight, fixed ladder, but that option does increase the cost.

"It depends on what everybody's budget looks like. I highly encourage putting a staircase system on a bin versus just the straight, fixed ladder, simply because you have more control on a spiral staircase than you do climbing a fixed ladder," Johnson declared.

The environment can also create dangerous conditions for the farmer by causing slippery surfaces on the ladders, steps, and walkways.

"Harvest time of year, we are in a humid, foggy, heavy dew situation in the mornings, and so those rungs are slippery. In addition, your feet are wet from walking in the grass or on walkways from heavy dew," Johnson asserted. "It doesn't take much to have a slippery surface when you're trying to climb those steps or ladder rungs."

When harvesting crops in the combine, Johnson explained how it is important to prevent any combine fires that might start, especially when crops are dry.

"One of the challenges of cutting a dry crop is a combine fire, and especially when the crop is soybeans or sunflowers. That is really because of the dust when harvesting those two types of crops," Johnson said.

Those residues are extremely dusty and have very fine particles.

"Once that dust gets in there, it can sit there and smolder. Stop and take time to grab an air compressor or even a leaf blower and get rid of the buildup of chaff," Johnson suggested.

Fire extinguishers can help, and so can a water truck that goes into every field as the crop is being combined. When the fire can't be controlled quickly, call 911 and get help, Johnson advised.

If a farmer decides to take the grain off moist and to dry it in the bin, make sure to keep all grain-drying systems as clean as possible.

"If there is a need to dry soybeans, remember that stem and plant pieces can get caught in dryer systems. Take the time to screen the crop before it goes in the dryer," Johnson cautioned. "For the type of investment we make in our dryer systems, it is well worth it."

—Reprinted with permission from Sue Roesler, Farm and Ranch Guide

For more farm safety tips, scan the QR code.

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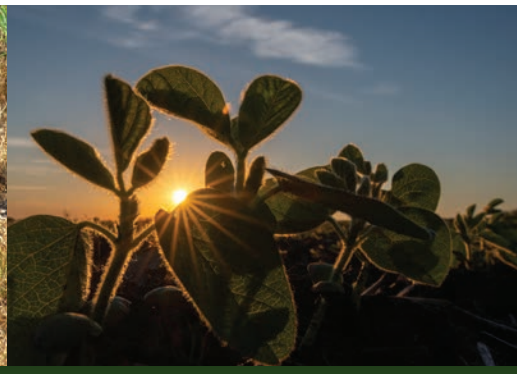

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Thank you for making the 11th annual Jamestown golf tournaments successful! The tournament is a way for the North Dakota Soybean Growers Association (NDSGA) to say thank you to members and supporters. Your membership dues and sponsorship of NDSGA events help to provide the necessary funds to continue policy and advocacy work in Bismarck and in Washington, D.C. We're proud of our past successes and are continually working to make things better for soybean growers throughout North Dakota.

Congratulations to our Jamestown tournament team winners:

First Place: Team Central Sales: Jeff Romsdal, Easton Romsdal, Vaughn Romsdal and Hunter Gegelman.

Second Place: Team Ellingson: Corey Haag, Jordan Kautzman, Don Kautzman and Jeff Schroeder.

Third Place: Team Streeter Elevator: Jeff Williams, Brett Williams, Eli Heflin and Andrew Heflin.

Congratulations to the Jamestown contest winners:

Closest to Pin #4: Brad Barnes.
Longest Putt #6: Corey Haag.
Longest Drive #9: Greg Gussiaas.
Closest to Pin #12: Myles Torgerson.
Longest Drive #16: Jordan Kautzman.
Longest Putt #17: Jacobi Lux.

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For more photos of the tournaments, check out facebook.com/NorthDakotaSoybeanGrowersAssociation.

Please check the NDSGA website soon at ndsoygrowers.com for dates and locations of our 2025 golf tournaments.

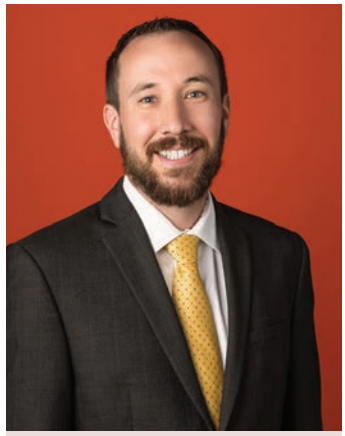
—Story by staff, photos by Addison K Creative Co. and staff

Jamestown Tournament winning team – Team Central Sales: Jeff Romsdal, Easton Romsdal, Vaughn Romsdal and Hunter Gegelman.

Jamestown Tournament second place team – Team Ellingson: Jeff Schroeder, Don Kautzman Corey Haag, and Jordan Kautzman.

Jamestown Tournament third place team – Team Streeter Elevator: Jeff Williams, Brett Williams, Eli Heflin and Andrew Heflin.

Farm Bill Proposal Enhances Safety Net



Scott Gerlt, Ph.D.
Chief Economist
American Soybean Association

The farm bill renewal process is heating up. The last farm bill, passed in 2018, was set to expire in 2023. No draft legislative text was released last year for a new farm bill. Instead, the 2018 Farm Bill was extended into 2024 to allow more time to work on the legislation. The House Agriculture Committee passed a version out of committee in May. The actual bill must go through the agricultural committees in the House and Senate before going to the full chambers and, eventually, the president to sign. This article analyzes the bill to understand how the proposal could change the farm safety net for soybean farmers.

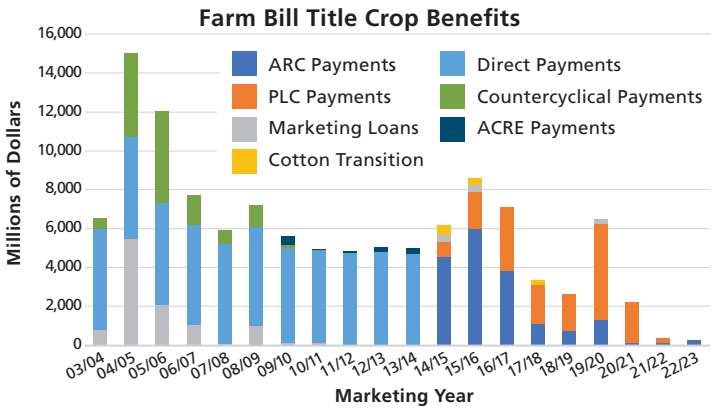
To understand how the House bill would affect the safety net, a brief review of the existing programs is helpful. There are several legs of the safety net in the current law, and the principal programs for crops are as follows.

- Price Loss Coverage (PLC) benefits are determined by the difference between the effective reference price (ERP) and the higher of the loan rate defined in the statute or the national marketing year's average price for a commodity. This amount is multiplied by the PLC yield and base acres for a farm as well as a few other factors. The PLC yield and base acres are determined by a farm's historical production to decouple the current planting decisions from the program's benefits. The effective reference price is the higher of the statutory reference price set in the farm bill or 85% of the 5-year Olympic average farm price. An Olympic average discards the high and low values, and averages the remaining observations. The ERP cannot exceed 115% of the statutory reference price. Soybeans have a statutory reference price of $8.40 per bushel, which results in an ERP bounded between $8.40 and $9.66 for the commodity.
- Agriculture Risk Coverage-County (ARC-CO) provides a safety net based on revenue. A benchmark is determined by multiplying the Olympic average county yield by the Olympic average national price. The county yields are adjusted for historical trend increases, and the national prices use the ERP if it is higher than the national price in any of the five years. As a result, the ERP is used for both PLC and ARC-CO. If the higher of the loan rate and the current year's national price multiplied by the current year's county yield is less than 86% of the benchmark, the payment rate is equal to the difference. However, the payment rate cannot exceed 10% of the benchmark. As a result, ARC-CO covers losses between 76% and 86% of the benchmark. The payment rate is multiplied by base acres and a few other factors.
- Marketing loan-based programs provide support when prices fall below the loan rates determined in the statute, but those levels are less than with the PLC program. The latter program maxes out at the point where the loan-based programs begin so that coverage does not overlap. The marketing loan-based program's benefits are provided based on actual production and use local prices for the calculation. Farmers can, alternatively, take out non-recourse loans at the loan rate to remain solvent while waiting to sell their crop after harvest.
- Crop insurance is in the farm bill, but most of the policies are not determined in the legislation. An exception is the Supplemental Coverage Option (SCO). This policy provides shallow loss, county-based buy-up coverage for participants. It covers the band between 86% and the coverage level of the principal elected for the crop. SCO can provide either revenue or yield coverage because it mimics the behavior of the principal policy. The producer is responsible for 35% of the SCO premium's cost.

Several important points should be made about the programs and their interactions. First, PLC and ARC-CO do not depend on current plantings or production while marketing loan-based programs and crop insurance do. PLC and ARC-CO are paid based on the base acres that are tied to the farm's historical crop production. Additionally, producers cannot be simultaneously enrolled in ARC-CO and PLC programs for a crop, but farmers can make a crop-by-crop enrollment election annually. In either case, the producer is eligible for marketing loan-based programs. Also, if a producer elects ARC-CO for a crop, that crop is ineligible for SCO. Last, SCO requires an out-of-pocket premium to participate while the other programs do not.

As mentioned, the House Agriculture Committee has passed a bill out of committee. The farm bill is a massive piece of legislation with many sections (titles). A summary of the changes for portions of Title I (Commodities) and Title XI (Crop Insurance) related to the soybean safety net follows:

- All statutory reference prices will be increased by 10% to 20% based on the per-unit production cost increases since 2014, which inherently increases the maximum ERP because it is set at 115% of the statutory reference price. The new soybean reference price will be increased by 19% to $10.00 per bushel, which would allow for a maximum ERP of $11.50 per bushel.
- The ARC-CO guarantee will be increased to 90% of the benchmark (from the current 86%). The maximum payment rate is also raised from 10% to 12.5%, effectively changing the band of coverage for ARC-CO from between 76% and 86% to between 77.5% and 90%.
- Current base acres are maintained, but farmers whose cropland acres exceed the base acres have a one-time opportunity to add acres based on this difference. The time period of 2019 to 2023 will be used as the basis for the determination. The total number of new base acres in the country cannot exceed 30 million. The update will be apportioned, if necessary, to prevent this from occurring.
- Marketing loan rates will have slight increases. The amount is 10% for most crops, including soybeans. The new soy loan rate will be $6.82 per bushel.



- The coverage level will be increased from 86% to 90% for SCO, and the producer-paid portion of the premium will be lowered to 20%.

The proposed changes would enhance the Title I safety net, which has seen a continual decline for the past 20 years (Figure 1). The 2014 Farm Bill moved Title I programs from fixed benefits to benefits triggered by adverse market conditions. This change is consistent with a safety-net philosophy but creates larger variability for the benefits. While variability has increased, the actual benefits have generally decreased due to fixed parameters in the legislation that become more irrelevant with the presence of inflation.

While the realized benefits have decreased over time, the House proposal would provide an increase for the safety net. Table 1 shows the potential ERPs for the life of the farm bill. The calculations are based on farm price projections from Food and Agricultural Policy Research Institute (FAPRI) that have been updated with the latest World Agricultural Supply and Demand Estimates (WASDE) prices and projections. Given some of the soybean price increases since 2020, the ERP will be higher than the statutory price and is projected to reach $10.50 per bushel in 2026 and 2027; importantly, $10.50 is based on price projections and is below the maximum ERP with the new statutory reference prices. By 2029, the ERP declines to the statutory reference price. Given the backward-looking nature of ERPs, the calculated values for the first few years are relatively unchanged. It is also clear that the current ERP cap of $9.66 per bushel (based on the soybean's current statutory reference price of $8.40) is quite limiting. However, these numbers do not account for uncertainty with the projections, which could change the values after the first few years.

To quantify the change for the safety net with the proposal, an American Soybean Association (ASA) model of market risk was employed. The model used projections from FAPRI-MU and the May 2024 WASDE with measures of price, yield and other risks to measure potential revenue risks and possible Title I support in response. For this work, we incorporated the 19% increase for the soybeans' statutory reference price. We also included the changes for the ARC-CO coverage and loan rates, but not the base acres. The model simulated 500 different outcomes based upon distributional assumptions.

Table 2 shows some of the simulated results for the 2026 crop year. A single year is shown to summarize the general effects without presenting five different tables. The 500 simulations had the average market outcome subtracted and then divided into five groups by ranking the change from market revenue per planted acre from smallest to largest. The smallest group (quintile 1) contained the 100 outcomes with the lowest market revenues. This bucket contained the worst financial years, and the outcomes were $148.38 below the average market outcome. On the other side, the fifth quintile contained the 100 best outcomes that averaged $145.34 above the average market outcome. Remember that the difference from the average is not the same as profitability, which is not estimated by the model. Instead, the measure showed the dispersion of outcomes.

The third and fourth columns of Table 2 add the Title I benefits to the change from market revenues for the quintile with current law (Current Title I) and the House proposal (House). Both proposals significantly improve upon the pure market revenues, but the House proposal increases the safety net beyond the current law, particularly during especially bad outcomes. In the worst-outcome quintile, current law improves the revenues from $148 below the mean to $76 below the mean. The House proposal increases that amount another $34 to $42 below average. In the second quintile, market revenues are $55 below average. The current farm bill improves that amount to $14 below average, and the House proposal takes the value to $1 above the mean. The pattern is largely repeated for the third quintile. While the difference for the market revenue changes from negative to slightly positive for this middle 20% of outcomes, bear in mind that this scenario is not the same as profitability. The Title I benefits disappear in the fourth and fifth quintiles as revenues climb. One can conclude that the programs are performing consistent with the intention to provide support for adverse events. The House proposal provides noticeably more ability to help offset adverse market revenues in those conditions.

Several assumptions included with the analysis warrant further consideration. First, the analysis treats a soybean base acre as equal to a soybean planted acre, allowing market revenues and marketing benefits to be added with the PLC and ARC-CO. These "acres" are, however, different entities, because a base acre only exists in policy and does not have to be planted with soybeans. If there is an adverse event that disproportionally affects soy, such as the trade war with China, the relationship between planted and base acres matters because benefits are paid for the base acres. The most recent base-acre

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Table 1: Potential Soybean Reference Prices Under the HAC Proposal ($/Bushel)

New Statutory Reference Price	Effective Reference Price				
	2025	2026	2027	2028	2029
10.00	10.38	10.50	10.50	10.00	10.00

Source: FAPRI-MU, May 2024 WASDE and ASA calculations.

Table 2: National Average Change from Mean Revenue per Acre for 2026 Soybeans

Revenue Quintile	Market Revenue	Revenue + Current Title I	Revenue + House Title I
1	-148.38	-76.15	-42.41
2	-54.73	-14.42	1.48
3	1.97	23.21	37.31
4	55.80	62.09	69.46
5	145.34	145.83	146.96

Source: ASA calculations.
Note: Revenues are dollars per planted acre. Title I benefits include ARC-CO and PLC benefits that are averaged by participation rate per soybean base acre and marketing loan benefits per planted acre.

Getting to Know the NDSC County Representative

Hayley Jung
Stanley, North Dakota, Mountrail County

Tell us about your farm.

I farm with my parents in Mountrail County, where we grow soybeans, wheat, canola and field peas.

What do you like best about farming?

I love being outside and running the equipment.

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

No, but I always knew I wanted to be a part of the operation in some way.

Why did you get involved with the North Dakota Soybean Council (NDSC) as a county representative?

My Extension agent called and asked if I would be interested. We discussed it and decided it would be beneficial to have the diversity of a young female as an NDSC county representative.

Why are soybeans part of your crop mix?

They're very good for the soil and our crop rotation. It's also fascinating that they have so many uses in the market.

If you could change something about the current operating climate for North Dakota farmers, what would it be?

I would change the high interest rates that farmers have to contend with.

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

Technology and precision agriculture have changed the most since I began farming.

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

I believe technology will continue to evolve and advance.

What do you like to do outside farming?

I enjoy spending time with friends and family, riding my motorcycle and reading!

If you could go anywhere, where would it be?

England would be very cool to visit and explore!

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

GPS is crucial to our operation.

—Story by staff, photo courtesy of Hayley Jung

Hayley is one of the North Dakota Soybean Council's county representatives. To learn more about serving on the North Dakota Soybean Council as a county representative or board member, scan the QR code.

Bean Briefs

USDA Requests Info on Biofuel Feedstock Standards

U.S. Department of Agriculture (USDA) Secretary Tom Vilsack has announced a request for information (RFI) related to the Clean Fuel Production Credit in order to establish voluntary standards for biofuel feedstock crops grown using climate-smart farming practices. These standards aim to quantify, report and verify the greenhouse gas (GHG) emissions effects, potentially influencing clean-transportation fuel policies at the international, national or state levels. This initiative seeks to create market opportunities for U.S. farmers while advancing environmental benefits.

The U.S. Treasury and Internal Revenue Service are starting the process of rulemaking to develop guidance related to the Clean Fuel Production Credit (45Z), which goes into effect January 1, 2025. This credit will replace the existing Biodiesel Tax Credit (BTC, 40A) and Sustainable Aviation Fuel Tax Credit (40B) and will apply to biodiesel, renewable diesel and sustainable aviation fuel (SAF).

Through this RFI, the USDA is collecting information to make a stronger case for more flexibility with the climate-smart agriculture practices that are used to lower the carbon intensity scores for the Clean Fuel Production Credit.

The American Soybean Association (ASA) supports climate-smart agriculture to enhance carbon intensity reductions but emphasizes the need for flexibility with the sustainability practices across all soy-producing states. The ASA recently expressed appreciation for soy's inclusion as a SAF feedstock under new Treasury guidance. However, the ASA has concerns that strict requirements, such as mandating both no-till and cover-cropping practices, could hinder participation, especially in northern states where these practices are less feasible due to climate constraints.

House T&I Committee Passes WRDA

The House Transportation & Infrastructure (T&I) Committee approved the Water Resources Development Act (WRDA) of 2024 legislation that authorizes the U.S. Army Corps of Engineers' Civil

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Getting to Know the Expert

Marisol Berti, Ph.D.
North Dakota State University (NDSU) Professor, Forages and Biomass Crop Production

Where did you grow up?

I grew up in Santiago, the capital of Chile. I studied agronomy, but I didn't have a farm. I studied agronomy as my undergraduate and just always liked plants. I also wanted to get out of the big city.

Tell us about your education.

Before I graduated with my bachelor's degree, I got an internship to come to the U.S. and work for a seed company in Breckenridge, Minnesota. I met a professor from NDSU who encouraged me to get my master's degree. After I finished my master's degree, I went back to Chile to work at the University of Concepcion in southern Chile, which I did for 10 years. I came back to NDSU again and got my Ph.D. in plant sciences. Then, I went back to Chile for two more years before coming to NDSU.

When did you begin working at NDSU?

In 2009, I took a position in forages for crops and bioenergy crops. My main thing is forages, but I've always been involved with crop production and cropping systems. I have worked with oilseed crops all my life, working on introducing new crops and with rotational crops. It was an easy transition to do that here as well as working on the forages and cover crops.

What is the focus of your work?

The focus of my work is forages, so I work mainly on alfalfa and alfalfa integration into cropping systems, and then, I work on bioenergy crops such as camelina. My main work is helping farmers adopt more sustainable cropping systems, not just crops. Incorporating cover crops into crop rotations holds onto the soil and may reduce nitrogen fertilizer use in the major crops. We're not trying to replace the major crops. We need them, but we need to find a way to grow them with less negative impact to the environment.

What is the best part of your work?

I really like all my research. I have a lot of work, so I get busy and stressed, but I really enjoy it. It's fun to do all this field research that I enjoy. I also really enjoy having students. The best part in academia is having students who make me feel younger just by being around them. I have nine graduate students now, so I'm very busy with them. They're all working on projects that we have and having fun learning about them. We get to work with a lot of interesting people all over the country and the world because we do a lot of international collaboration.

What do you like to do away from work?

I like gardening, which people think is crazy, since I work with plants all day. I have a certified pollinator garden at my house. I'm an artist, so I paint a lot, too. I do mainly acrylic painting and do lots of flowers. I also love to read.

—Story and photo by Daniel Lemke

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data from 2023 show 53.8 million base acres of soybeans, whereas producers reported how they expected to plant 86.5 million acres in 2024. At the national level, one planted acre of soy equates to .62 base acres.

Second, including the House provisions to add new base aces would have helped minimize this difference while also giving producers a better safety net. Without farm-level information, it is impossible to precisely estimate the number of new soybean base acres. For the 2019 to 2023 crop years, soybeans represented 33% of the acres planted with major crops. While the additional acres may not be evenly distributed in areas with these crops, soybeans should be a significant beneficiary of the new base acres when using this formula.

The difference between planted and base acres for soybeans bleeds into the last important assumption, which is the exclusion of SCO changes in the analysis. Including SCO would improve the outcomes for the House proposal. However, this effect is expected to be limited. In the analysis, ARC-CO payments are higher by almost $8 per base acre, on average, for the 2026 crop. The scenario has almost 80% of the base acres enrolled in ARC-CO for this reason, which makes much of the soy ineligible for SCO. Soybeans have never received a PLC payment, and producers have, historically, enrolled from 80% to almost 100% of the base acres in ARC-CO. In 2023, fewer than 5 million soybean acres had SCO policies. In effect, 44.5 million soybean base acres enrolled in ARC-CO that year made many more planted acres ineligible for SCO. For this reason, including the SCO provisions in the analysis would likely have made little difference.

In conclusion, the House Agriculture Committee's farm bill proposal appears to contain noticeable benefits for soybeans. Farmers would have a stronger safety net after years of decline for the Title I programs. The ASA analysis exhibits that, in extremely adverse market conditions, soybean producers could realize over $30 per acre in additional benefits compared to the current farm bill. While this change would not return farmers to average levels of profitability, it would shrink the difference. As a result, the House's farm bill proposal represents a positive change for soybean farmers in adverse conditions.

—*Story continued from page 32*

Works Program for projects to improve the nation's ports, inland waterway navigation, flood and storm protection, and other aspects of our water-resource infrastructure.

The American Soybean Association's (ASA) primary advocacy focus this year is ensuring that inland waterway projects funded through the Infrastructure Investment and Jobs Act (IIJA) are completed by using 100% general revenue rather than Inland Waterway Trust Fund (IWTF) dollars. The IIJA allocated funds for seven inland-waterway construction projects, but unforeseen expense overruns due to increased supply and transportation costs have left these projects underfunded. Without a specific provision in WRDA 2024 to waive the IWTF cost-share for these major rehabilitation projects, there is a significant risk of depleting the IWTF, which could delay critical, ongoing capital improvement projects.

The WRDA bill that passed the T&I Committee did not include any provisions for modernizing the inland waterway system, despite the support of over 50 House members who submitted requests similar to that of the ASA. However, the Senate Environment & Public Works Committee passed its version of the WRDA, which permanently adjusts the inland waterway cost-share for construction and major rehabilitation projects to 75% general revenues (up from 65%) and 25% (down from 35%) Inland Waterways Trust Fund, in May. The Senate bill also ensures 100% full federal funding for projects outlined in the Infrastructure Investment and Jobs Act. Both provisions were top requests made by the ASA.

The two WRDA bills will, eventually, be negotiated in a conference committee. The ASA will continue its advocacy to ensure favorable outcomes for our inland waterways.

Bipartisan Senate Letter Calls for Higher 2026 RFS Volumes

A bipartisan group of senators is calling for higher 2026 Renewable Fuel Standard (RFS) volume levels.

In a letter to the Environmental Protection Agency (EPA), Sens. Chuck Grassley (R-IA) and Amy Klobuchar (D-MN), along with 16 colleagues, pushed for higher RFS levels for biomass-based diesel and advanced biofuels, with an equal increase in total volumes.

"America's environmental and energy security depend on the widespread production, availability and use of biofuels. Biofuels play a particularly critical role in emissions reduction for heavy-duty transportation—including aviation, shipping, rail and trucking—while opening up economic opportunities for American farmers," the senators wrote in the letter. "A strong RFS and broad availability of homegrown agricultural feedstocks are critical for ensuring we keep up the progress we have made in decarbonizing our roads, seas, railways and skies."

The letter also highlights the environmental benefits of biofuels, along with the economic advantages for the entire supply chain.

Biomass-based diesel is a vital domestic market for soybean farmers. The RFS has reduced U.S. dependence on foreign oil, reduced greenhouse gas emissions and added value by increasing the demand for soybeans and corn.

The ASA and its farmer leaders continue to advocate for a healthy RFS that reflects the expansion and potential of the renewable fuels industry for all biofuels.

ASA Raises Concerns About the California Locomotive Regulation

Ahead of the House Committee on Science, Space and Technology hearing on the nationwide implications of California's In-Use Locomotive Regulation, the American Soybean Association (ASA) sent a letter to Chairman Frank Lucas (R-OK) and Chairman Jay Obernolte (R-CA), acknowledging their leadership to address this critical issue.

The In-Use Locomotive Regulation issued by the California Air Resources Board (CARB) would require rail propulsion technology in the state to shift to zero-carbon technologies by 2035, effectively phasing out all locomotives that are not electric.

The letter serves as a proactive call to action, emphasizing the importance of addressing the regulation's potential adverse effects on the agricultural industry through sustainable transportation practices and biofuel innovation.

The ASA has voiced concerns about the financial and operational effects of the regulation on freight rail carriers and their customers, including soybean farmers. Issued by CARB, the regulation could result in higher transportation costs and operational inefficiencies across the rail network.

Additionally, the ASA highlighted the pivotal role of biomass-based diesel to curb carbon emissions and to combat climate change. The association emphasized the fuel efficiency of railroads and the ongoing transition of Class I railroads to biodiesel and renewable diesel blends as part of their emission-reduction strategies.

The ASA has expressed a willingness to collaborate with the House Committee on Science, Space and Technology in order to address the repercussions of California's regulation on the agricultural sector and to advocate for policies that promote the use of soy-based biofuels.

Conservation Legacy Award Applications

If you share the story of how conservation is fundamental to your farming operation, you could be recognized with a Conservation Legacy Award. This honor celebrates U.S. soybean growers who are maximizing the profitability and longevity of their farm through a variety of conservation-minded management practices. Examples include, but are not limited to, cover crops, reduced tillage, nutrient management, irrigation management, diversified crop rotations, buffer implementation, terraces and waterways, precision agriculture and consumer engagement.

All U.S. soybean farmers are eligible to apply. Entries are judged on soil, water, input and environmental management; conservation; and sustainability.

The selection process for these awards is divided into four regions: Midwest, Upper Midwest, Northeast and South. A farmer from each region will be recognized as a Regional Conservation Legacy Award winner at the 2025 Commodity Classic in Denver, Colorado, and one of those four individuals will be named the 2025 National Conservation Legacy Award recipient.

Regional Conservation Legacy Award winners receive the following items:

- An expense-paid trip for two to the 2025 Commodity Classic (February 28-March 4, 2025) in Denver.
- Recognition at the American Soybean Association's (ASA) Awards Celebration at the 2025 Commodity Classic.
- A feature story about their farm that will be promoted to agriculture media outlets.
- A video produced at their farm, showcasing their unique conservation practices.

The Conservation Legacy Awards are sponsored by the ASA, BASF, Bayer, Nutrien, the United Soybean Board/Soy Checkoff and Valent U.S.A.

Applications must be submitted by August 15, 2024.

—Story by Daniel Lemke

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