

THE NORTH DAKOTA Soybean GROWER MAGAZINE

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OCTOBER 2016



INSIDE
Technology
Maximizes Yield
PAGE 16



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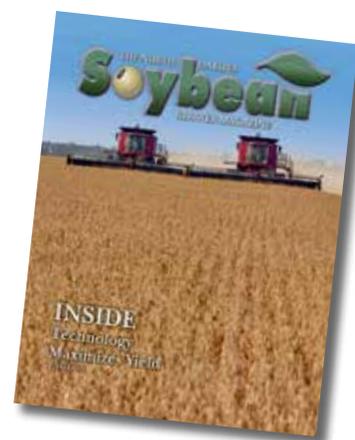
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O n the cover

About the cover: For many North Dakota farmers, it's not Christmas that's the most wonderful time of the year, it's harvest. After months of care and worry, farmers across the state are gathering in the crops they've worked so hard to grow. This issue focuses on the way soybean farmers are striving to get better at what they do.

—Photo by Wanbaugh Studios



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Lawmakers Deal with Budget Shortfall, Set Stage for the 2017 Session

Governor Jack Dalrymple called legislators back to Bismarck in early August in order to deal with concerns about North Dakota's state budget. The special legislative session was necessitated by lower-than-anticipated revenue collections and the need to move funds in ways in which only the legislature has authority.

North Dakota's economy is driven by both agricultural and energy production. Commodity prices for crops and crude oil are much lower than were anticipated when the 2015-2017 biennial budget was developed and approved by legislative action. The initial 2015 budget forecasts anticipated gathering \$5.64 billion in revenue. The actual and revised revenue projections are now \$4.26 billion, leaving an approximate \$1.38 billion shortfall.

Addressing the Shortfall

The governor took action in the executive branch in March, ordering a 4.05% across-the-board budget-reduction allotment. Both the legislative and judicial branches voluntarily matched his 4.05% budget-reduction target. Revenues and future revenue projections continued to dip below the original and revised estimates, so another revised revenue projection was ordered and completed in July.

Governor Dalrymple called for a special legislative session in early August, acknowledging the need for legislative action to move funds be-

yond his current authority. He also ordered another 2.5% across-the-board, budget-reduction allotment to reduce state spending and to gain access to the Foundation Aid Stabilization Fund. This action will keep state K-12 school funding "whole" through the biennium.

The legislature responded, collaborating with the governor to balance the biennial budget by moving the last of the Budget Stabilization Fund money into the General Fund. The legislature also approved a contingency plan to utilize up to \$100 million of Bank of North Dakota profits in the General Fund as needed. Some critical funding for the Department of Human Services and the Department of Corrections was also restored.

Following the special session, the legislature adjourned with a balanced budget. Legislators also left with a general consensus that, if additional budget work is needed for this biennium, they will resolve those issues in January 2017 as they begin their next scheduled legislative session.

What Happens Next

The 2017 session promises to be full of challenges for lawmakers, including

- How the legislature will lay a foundation for continued economic growth while restoring funding to the Budget Stabilization Fund
- Continuing "whole" K-12



NDSGA Legislative Director Scott Rising pays close attention to issues impacting the state's soybean farmers and shares that information with growers across the state.

funding without the Foundation Stabilization Fund

- Continuing state-funded property-tax relief
- Medicaid expansion funding

Other important, but lesser-funded, citizen concerns will also be part of the challenge. There will be no shortage of important prioritizing and work to be completed in 80 days or less.

The North Dakota Soybean Growers Association will monitor the upcoming session to ensure that soybean farmers are represented and kept updated about issues that affect their operations and profitability.

*Harvest plenty and safe,
Scott Rising*

—Photo by Staff



Craig Olson, President North Dakota Soybean Growers Association

The Definition of Sustainability on the Farm Applies to More Than We Know

The past 10 years have brought about big changes in agriculture. Most people recognize that the equipment we use has changed dramatically. Many of our tools have become significantly larger with advanced technologies that allow us to cover more ground. Along with our increased capacity comes a noticeable improvement in efficiency.

Through technology, research and education, we are learning about a new component of agriculture: sustainability.

It took me a while to figure out the word "sustainable." Maybe, I ignored it at first or didn't think it applied to me. I thought that "sustainable" only applied to certain farming techniques, such as no-till or other specific practices until the issue was addressed at a meeting I attended. Then, I realized that the term "sustainable" has different outcomes for each farm.

Sustainability only occurs through continuous improvements in our farming practices like the use of technology, seed, equipment or drain tile, to name a few. Sustainability means we as farmers take care of the land so that we can produce a crop now while leaving our soil and water in good condition for future generations. Farmers also need to be economically sustainable in order to stay in business. Since many of North Dakota's farms have been in the same families for generations, we must be doing something right.

Customers who buy our soybeans are looking at what we are doing to become more sustainable. We need to show everyone that we are continually improving our best management practices for economic and environment sustainability not only for today's crops, but also for the state's future food production.

Membership Application

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

<p>Name: _____</p> <p>Spouse: _____</p> <p>Date of Birth: _____</p> <p>Farm/Company Name: _____</p> <p>Address: _____</p> <p>City, State, Zip: _____</p> <p>County: _____</p> <p>Phone: _____</p> <p>Cell: _____</p> <p>Email Address: _____</p> <p>Occupation (Please check all that apply)</p> <p><input type="checkbox"/> Farmer <input type="checkbox"/> Retired <input type="checkbox"/> Agribusiness</p> <p><input type="checkbox"/> Finance <input type="checkbox"/> Elevator <input type="checkbox"/> Other</p> <p>Do you currently grow soybeans?</p> <p><input type="checkbox"/> Yes _____ <input type="checkbox"/> No _____</p> <p>Soybean Acres: _____ Total Acres Farmed: _____</p>	<p>Do you raise:</p> <p><input type="checkbox"/> Cattle <input type="checkbox"/> Hogs <input type="checkbox"/> Poultry <input type="checkbox"/> Dairy</p> <p>How did you hear about NDSGA? (Please circle one)</p> <p>Recruited in person; Recruited by phone, Magazine; Internet; Mailing; Radio; Event; Other</p> <p><input type="checkbox"/> 3-Year Membership \$200 <input type="checkbox"/> 1-Year Membership \$75</p> <p><input type="checkbox"/> Check enclosed (please make checks payable to NDSGA)</p> <p><input type="checkbox"/> Credit Card: Visa / MasterCard / Discover / American Express</p> <p>Card Number: _____</p> <p>Expiration Date: ____/____/____ CVC: _____</p> <p>Name on Card (Please print): _____</p> <p>Signature: _____</p> <p>Mail application with payment to:</p> <p>North Dakota Soybean Growers Association 1555 43rd Street S., Suite 103 Fargo, ND 58103</p>
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An Inside View

Josh Gackle has a much different perspective on farm policy than most of his fellow farmers. For more

than a decade, the Kulm, North Dakota farmer was up to his elbows in the legislative process.

Gackle farms with his dad, brother, uncle and grandfather on a third-generation farm, growing soybeans, corn, wheat and barley. He returned to farming full time in 2012, answering the call that had always been there.

“I grew up here, and farming has always been in my blood,” Gackle says. “I have always enjoyed the town in which I grew up and enjoyed working with my family. I’m glad to be back.”

A Policy Path

Gackle earned a degree in history and secondary education from Bethel University in St. Paul, Minnesota. He taught social studies and coached in the Twin Cities suburbs before going to work for U.S. Senator Rod Grams from Minnesota. Gackle moved to Washington, D.C.,

in 1999 before returning to the senator’s Minnesota office in 2000. He later worked for the Minnesota state legislature as a staff member on several policy committees.

In 2007, Gackle joined Minnesota Governor Tim Pawlenty’s staff, working on environmental, energy and agriculture policy. After four years with Pawlenty’s office, he became a policy advisor for several wind-energy companies.

While working in Washington and Minnesota, Gackle came back to North Dakota when he could to help on the farm during planting and harvest. In 2012, the opportunity arose for Gackle to permanent-

ly return to the family operation.

“It’s something I always wanted to do,” Gackle says. “I decided to come back to keep the farm going for the long term. Our family farm is transitioning from one generation to the next, so we came back to try to expand the operation and keep it successful.”

A Unique Resource

Gackle’s policy experience is a unique resource for North Dakota’s soybean farmers. Earlier this year, he began serving as a North Dakota Soybean Growers Association (NDSGA) director. Having more than a decade of personal experi-

ence with public-policy development has taught Gackle how the process works.

“Agriculture as a whole and we as commodity producers face a lot of complicated issues with varying viewpoints on how they can be solved,” says Gackle. “I’ve learned that, more often than not, there is more than one solution. As farmers, we need to get our viewpoints across, but we also need to be willing to compromise and to listen.”

Gackle recognizes that regulatory and consumer concerns are now part of modern agriculture. Consumers are well informed and conscientious about what they’re buying and putting on their table. Gackle says that farmers need to be conscious and aware of consumer concerns.

“Commodity producers face a lot of complicated issues with varying viewpoints on how they can be solved.”

Gackle views water quality and farming's impact on water, as well as consumer and governmental concern about how farmers grow food, as important issues facing North Dakota farmers. Consumers and regulatory agencies, such as the Environmental Protection Agency (EPA), are giving increased scrutiny to the fertilizers, pesticides and herbicides that farmers use to grow a crop. Gackle says that farmers need to be aware of those concerns, but should also be prepared to explain why those products and practices are beneficial.

"Sometimes, we get a bad rap because, in almost all cases, we are the ones who will be relying on the land into the future. We want to protect it because there is no benefit to us to do things that will harm the land," Gackle contends.

Gackle says that, even though North Dakota is an ag-friendly state, federal agencies and nonprofit

groups make their presence known on issues that impact farming. He believes that it is important to form relationships with those groups for a mutual understanding about how agricultural productivity and environmental protection can work together.

Farmer Involvement

Because there are many external forces impacting agriculture, Gackle encourages farmers to stay up to speed on issues that could affect their operations. He says that the NDSGA works to keep farmers informed about agriculture policy discussions that are important to them. Gackle adds that farmer input is important to keep the NDSGA aware of issues happening across North Dakota.

Having been on the "inside" of both state and federal policy discussions, Gackle hopes that his experience and commitment to

agriculture will benefit the NDSGA and its members.

"I know from the outside the whole policy process can look like a mess," Gackle admits, "but having experience helps to know that there are ways to work with others to get things done. Knowing the mechanics can help make the process less confusing."

Gackle's policy experience has also taught him how important it is for people to connect with their elected representatives, both as individuals and as part of a group.

"Stay in touch with your legislators," Gackle recommends. "They are very responsive to their constituents. Communicate directly because they want to be helpful to the extent that they can."

Individual farmer voices are magnified when we speak as part of a larger group, whether it's the NDSGA or another farm organization."

Gackle sees increasing competition in agricultural production from other countries as an issue that North Dakota farmers will face. The U.S. has traditionally been the most productive country in the world, but Gackle sees other countries gaining ground. That competition will continue to drive farmers to increase efficiency and productivity in order to be the low-cost provider. He also believes that it's important to continue working to expand the market for North Dakota soybeans so that they remain a viable crop that offers farmers a profit potential.

"The future is bright," Gackle says. "The world population is growing, and there are challenges that come with it, but we, as farmers, will adapt to meet those challenges."

—Story and photos by Daniel Lemke



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Experience with policy development on a state and national level makes Kulm farmer Josh Gackle a valuable resource for the NDSGA.

Dear Valued Soybean Producers,

On November 11, we all celebrate a very special holiday: Veterans' Day. I have never served in the military, fought bravely on a battlefield, or left my family and friends for long periods of time to travel across the world to defend our country's freedom. I have never worn the uniform, gone to battle or attended to a wounded soldier. I cannot begin to imagine what our veterans—and their families—have experienced: their fears, their courage, their pain and their endurance.

I am writing this message as a truly grateful citizen. To all of you who currently serve in the military, who previously served or who have family wearing the uniform, thank you. Thank you for your courage and your sacrifices that continue to preserve and protect the many freedoms we enjoy today.

Since World War I, the United States of America's Army, Navy, Air Force, Marines, and Coast Guard have fought in 10 battles:

- World War II

- Korean War
- Vietnam War
- Bay of Pigs
- Grenada
- Invasion of Panama
- The Persian Gulf
- Intervention in Bosnia and Herzegovina
- Invasion of Afghanistan
- Invasion of Iraq

While I am very grateful for the individuals who bravely served and happy for those who returned to their families, not everyone survived or fared well. Some people did not make it home alive; some people came home with severe injuries and other challenges; and many people have not yet come home. At the same time, many brave men and women continue to serve our country with honor and valor, knowing that, at any moment, they can be sent into harm's way. The enormity of their sacrifice cannot begin to be measured.

John F. Kennedy said, "As we

express our gratitude, we must never forget that the highest appreciation is not to utter words, but to live by them." Saying thank you is really just the beginning. We need to be it and show it. Our gratitude needs to be expressed more than just once a year on Veterans' Day. The next time you pass a man or woman in a military uniform at an airport or on the street, take the time to say "thank you for your service." If you ever have the good fortune of flying first class on an airplane and you see a soldier walking toward the back of the plane, offer him or her your seat. It's one small way to show your gratitude.

President Ronald Reagan said it well in a speech that he gave during the Veterans' Day Ceremony at the Vietnam Memorial on November 11, 1988:

"For too long a time, they stood in a chill wind, as if on a winter night's watch. And in that night, their deeds spoke to us, but we knew them not. And their voices called to us, but we heard them not. Yet in this land that God has blessed, the dawn always at last follows the dark, and now morning has come."

The night is over. We see these men (and women) and know them once again—and know how much we owe them, how much they have given us, and how much we can never fully repay. And not just as individuals but as a nation, we say we love you."



Diana Beitelspacher,
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North Dakota
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Soybean Council Seeks Producers for Board Leadership Opportunities *Producers Also Sought to Fill Vacant County Representative Seats*

In 2017, the North Dakota Soybean Council (NDSC) will seek four soybean farmers from the following districts to serve on its Board of Directors:

- District 2: Ransom and Sargent Counties
- District 8: Nelson, Steele and Griggs Counties
- District 10: Walsh, Pembina and Cavalier Counties
- District 12: Southwestern North Dakota Counties (See map)

Nomination forms will be issued to soybean producers in the counties listed above in January. Election ballots will follow in February. You can nominate yourself or someone you know in your county who has a passion for the soybean industry and a willingness to serve.

Who is qualified to serve as a director on the NDSC?

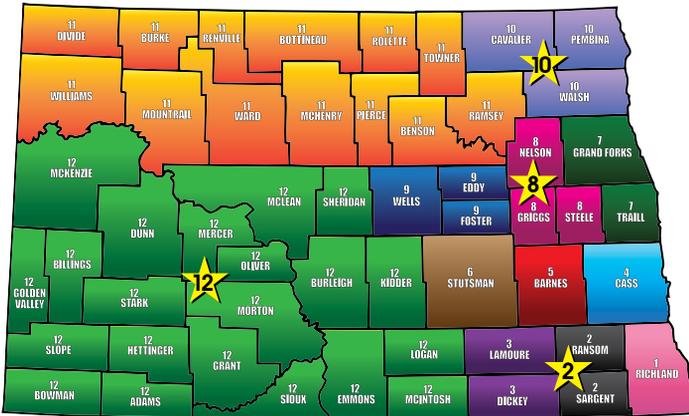
Any person who plants or causes to be planted a soybean crop where

the person has an ownership interest with the intent that, upon maturity, the crop will be harvested. The person will meet this requirement during the next available growing season or has met this requirement during the immediately preceding growing season. Organic producers who have been exempted from paying assessments are not eligible to serve on the NDSC board.

Are candidates from diverse backgrounds

encouraged to run for a director position?

Women and men soybean farmers are encouraged to run for a board seat. Many case studies have shown that a diverse board improves the outcomes and decision-making processes, enhancing performance. As leaders in the soybean industry, we compete in a global and a domestic marketplace that is growing more diverse. In this ever-more challenging business environment, the ability to draw



on a wide range of viewpoints, backgrounds, skills, and experiences is critical for our continued success.

What is the time commitment required for board service?

The NDSC board meets quarterly for two days in Fargo. Most board members are appointed to serve on state and national boards that work to support the soybean industry. Examples include the Soy Transportation Coalition, North Central Soybean Research Program, National Biodiesel Board, World Initiative for Soy in Human Health, U.S. Soybean Export Council and the Northern Crops Council to name a few. These external meeting commitments range from three to four meetings a year - averaging 1 – 3 days in length. Reimbursement is provided for travel to and from all these meetings, along with lodging and meals.

What are the expectations of service?

The NDSC board is a working board, which means that directors are expected to attend all committee and board meetings, to come prepared to the meetings in order to make informed decisions, to attend various NDSC-sponsored meetings and events, and to comply with NDSC policies as well as state and federal regulations. New

directors participate in a full-day orientation session to integrate them into the NDSC work. Directors are supported by a six-member team of qualified, experienced and dedicated employees.

Why serve? What's in it for me?

- Service on the NDSC board of directors:
- Enables you to influence how your checkoff dollars are invested.
- Places you in a position to influence the industry's direction.
- Enables you to greatly expand your network of fellow producers, leaders and key influencers in the soybean industry on a state or national level.
- Greatly increases your industry knowledge through your exposure to production research, domestic and international marketing, transportation, educational opportunities and other areas.

Most importantly, service is supported with training and mentoring.

Not quite ready for board member service? Consider serving as a "County Representative".

Currently, of the four districts up for election in 2017, there are 16 counties that do not have anyone serving as "County Representative"

liaisons between soybean farmers in those areas and the NDSC. We would like to have these vacancies filled.

What Counties are in Need of County Representatives in 2017?

- Adams, Billings, Bowman, Burleigh, Dunn, Golden Valley, Hettinger, McKenzie, Mercer, Morton, Oliver, Sheridan, Sioux, Slope and Stark.

What are the responsibilities of a County Representative?

While there are no regularly scheduled meetings for county representatives to attend, there are many opportunities to serve that do not require a large investment of time or travel. Examples of ways to serve include:

- Participate in soybean producer outreach efforts – provide feedback on programs and initiatives NDSC is interested in pursuing.
- Provide input to establishing the NDSC's research priorities for the year
- Attend at least one meeting a year with NDSC board and staff to become more familiar with

the work of NDSC

- Attend the annual Soybean Expo to be recognized
- Participate in NDSC and United Soybean Board director election process
- Attend NDSC sponsored events and producer education meetings as able
- Attend a County Representatives orientation session to learn about the work of NDSC
- Help promote, educate and communicate the work of NDSC to producers in their counties
- Communicate issues of concern regarding the soybean industry or NDSC to NDSC
- Inform NDSC of new soybean producers in their area who we may not have on our mailing list

How can I learn more about serving on the NDSC board or as a County Representative?

Contact Diana Beitelspacher at the NDSC office by telephone, toll-free, at 888-469-6409 or, in the Fargo area, at (701) 239-7194. You can also send an email to dbeitelspacher@ndsoybean.org.

—Story by staff, photo courtesy of CommonGround Kansas



A NEW EXPERIENCE

Casselton Farmer Worked to Change Views About Soybean Value

Joe Morken's first overseas experience promoting North Dakota soybeans offered a remarkable contrast.

The Casselton, North Dakota, farmer traveled to China and Taiwan in July as part of a three-state effort to convince soybean crushers, feed millers and purchasers to look at soybean quality and value differently.

China is the world's largest soybean consumer. The nation has over 1.3 billion people and also boasts the world's largest feed industry. Hundreds of mills across

the sprawling country produce feed for chickens, ducks, hogs and fish. Many of those rations include soybeans as a primary ingredient.

Morken was part of a delegation of farmers, researchers and marketers that met with the top feed producers in China to offer them a different view of soybean value.

"We visited with the top five feed mills in China," Morken says. "When you can get that one-on-

one interaction with the top five in China, and we all know their size of population, that's impressive."

A Better Measure

Soy products have traditionally been valued based on their crude protein content, putting northern-grown soybeans at a disadvantage. Crude-protein content is influenced by several factors, including the length of the growing season, temperature and precipitation. Because of typically cooler and drier conditions than the ones faced by farmers in the southern U.S. or South America, northern growers are often paid less for their soybeans and meal.

Research has shown that a soybean's amino-acid profile is a better indicator of soybean value than strictly measuring crude protein. Soybeans from the upper Midwest typically have favorable amino-acid profiles.

For several years, soybean farmers from North Dakota, Minnesota and South Dakota have joined forces to promote the presence and balance of essential amino acids in soybeans as a more accurate measure of the soybean's nutritive value. By personally visiting with feed millers, nutritionists and soybean buyers, the farmers and soybean researchers are trying to change the way soybeans are valued.

"Our northern beans are higher in the critical amino acids versus the comparison to the crude protein," Morken says. "When you feed livestock, you're not feeding on the crude protein; you're feeding on those amino acids, so we're here to change that mentality of just looking at the crude protein to instead look at the whole package."

"We've always valued soybeans and meal based on the protein level, but animals don't need protein," says Seth Naeve, a soybean agronomist at the University of Minnesota. "They (animals) don't have a protein requirement; they have an amino-acid requirement;



Morken (at right in white shirt) and the entire EAA team met with many of China's leading feed manufacturers including the Twins Group in Nanchang, China.



Making personal connections with customers was an important part of the EAA mission's purpose.

and amino acids are what make up protein. We're helping purchasers understand that it's not just the total amount of amino acids, but the ratio of the most critically limiting amino acids that is the real driver."

Measuring the critical amino-acid value (CAAV) is a tool to help determine the meal's quality. The CAAV is determined by adding the percentages of lysine, threonine, tryptophan, methionine and cysteine; and dividing that number by the total amino acids. Technologies such as near-infrared spectroscopy, which is now common in modern feed facilities, can help users to understand the meal's composition. Buyers and nutritionists can gather

additional information about the quality of the meal they're buying by measuring the meal's CAAV. Higher-quality meal helps animals perform better.

Big Hitters

The delegation visited large feed producers such as the Twins Group Company in Nanchang, China. The Twins Group is the top hog-feed manufacturing company in China. General Manager Yuan Ji Hong said that the company has a goal to produce 8 million metric tons of hog feed this year, which is more feed than many entire countries produce. Other stops included a visit in Guangzhou with the Haid

Group which has a goal of 8 million metric tons of feed production in 2016. Tongwei is the largest aqua-feed manufacturer in China, producing about 4 million metric tons of total feed. New Hope/Liuhe is the largest manufacturer in China, producing 15 million metric tons of feed annually, making it the third-largest feed producer in the world.

The essential amino-acid message has been spread in China for several years, and feed manufacturers are beginning to use it as a measure. Convincing purchasers to value soybeans based on their amino-acid value could open the door for more northern-grown beans to enter the country.

"What we're trying to do is drive demand so that more purchasers look to the Pacific Northwest, not as the low-price source, but really as a high-value option for them," Naeve adds. "We're working to not only increase the volume, but also (to) increase the purchase price. That will definitely trace all the way back to the farmstead."

New Ground

From China, the world's largest feed market, Morken and the rest of the delegation traveled to Taiwan, which has a much smaller population and feed industry. Regardless, the island nation provides a sizeable opportunity for North Dakota soybeans.

Taiwan's overall feed production is about 7 million metric tons per year according to Julian Lin of the U.S. Soybean Export Council. Production is split evenly between poultry and swine production between 40-45 percent each, with aqua feed making up the remaining 15 percent.

Currently, Lin says that about 57 percent of the soybeans, about



Morken (left) and Minnesota soybean farmer Patrick O'Leary logged tens of thousands of miles on planes and high speed rail to promote northern-grown soybean meal.

1.4 million metric tons, entering Taiwan are from the U.S. Taiwan's total import volume is 2.63 million metric tons. Brazil has about 39 percent of that market while Canada, Argentina and Paraguay also export to Taiwan.

The July visit was the first time that Taiwan's feed industry was presented with the essential amino-acid concept as a better measure of soybean quality. The delegation planted seeds that will hopefully lead to more meal purchases from the Dakotas and Minnesota.

For Morken, the mission gave him an opportunity to promote northern-grown soybeans while building relationships with key customers.

"This was my first time overseas on this mission," Morken says. "The essential amino-acids message has been going on for several years, and the volume since they've started this message has increased greatly. So to continue the relationship with current buyers and meet with some of these big buyers for the first time, if we can get our foot in the door and keep chipping away, it will be big."

—Story and photos by Daniel Lemke



Morken toured the Haid Group feed mill in Guangzhou, China, which produces swine, poultry and aqua feeds, with soybean meal as a key ingredient.

Myanmar Team Gets Firsthand Look at Soybean Production in North Dakota

The North Dakota Soybean Council (NDSC) hosted representatives from the Myanmar Edible Oil Dealer's Association as part of their U.S. visit August 24-25. The team heard presentations on soybean production in North Dakota and how almost all soybeans exported from the state are bound for Asia.

The team also visited the Colfax Farmer's Elevator, where they saw grain trucks unloaded and the elevator preparing for the fall harvest. The group visited Scott Gauslow's farm to see modern soybean production methods firsthand.

After visiting North Dakota, the team traveled to Iowa for company visits, before heading to Indianap-

olis for the Global Trade Exchange (GTE) Conference and Tradeshow. NDSC was a proud sponsor and exhibitor of GTE.

American Soybean Association/

World Initiative for Soy in Human Health (WISHH) Division Director for Asia Alan F. Pooock accompanied the team during their trip. Funding for the team's visit was

provided by the U.S. Department of Agriculture's (USDA) Emerging Market's Program.

—Story by WISHH, photo by Staff



Myanmar Trade Team visited NDSC office in Fargo on August 24. NDSC Director of Market Development Stephanie Sinner, far left, along with NDSC Board Directors Matt Danuser of Marion, second from left, and Art Wosick of Minto, middle, spent the day with the team.

2016 North Dakota State FFA Convention

Fiber and/or Oil Crop Production Proficiency Award – Sponsored by North Dakota Soybean Council (NDSC). From left to right: Chase Pederson, Carrington; Megan Johnson, Garrison, winner of award; Suzanne Wolf, NDSC; Hunter Allickson, Rugby; not pictured, Dylan Finken, Max.





NDSC Learns about New and Emerging Markets in South America

North Dakota Soybean Council (NDSC) Director Austin Langley of Warwick participated in a trade mission June 6-11, 2016. The trade mission was coordinated by Peter

Mishek of Mishek Inc. and focused on learning more about the export opportunities in South American countries that use U.S. soybean meal in livestock feeds. The group visited

dairy operations in Costa Rica and Colombia. The small trade team included soybean producers from North Dakota, Iowa and Nebraska. Visits included Solla, Dos Pinos and Contegral. Contegral is a company that is highly integrated in all aspects of the agricultural food chain - from growing to trucking, processing feed stock, and grocery stores.

“It was interesting to learn how the free trade agreement with U.S. and Colombia has resulted in Colombia making the United States its highest grain supplier above Argentina and Bolivia,” says Austin Langley. “It’s clear there is a lot of opportunity for U.S. grain to continue growing in both of these countries.”

According to the Foreign Agriculture Service, in 2015, U.S. food and agricultural exports to Colombia totaled more than \$2.4 billion — up 120 percent from 2012, the year the U.S.-Colombia Trade Promotion Agreement took effect. Colombia currently ranks ninth among U.S. customers, with top products including corn, soybean meal, soybeans, rice, pork, and prepared foods. NDSC strives to invest checkoff funds in new and growing markets that can be supplied with high quality North Dakota soybeans.

—Story by Staff, photo by Wanbaugh Studios



Austin Langley

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Knowing Your Numbers

Farmers would know if there were a pest on their farms costing them thousands of dollars, right?

According to researchers, not necessarily.

Soybean Cyst Nematode (SCN) is a damaging pest that costs American soybean farmers 1.2 billion dollars annually. According to the most recent United States Department of Agriculture survey, there were 81.8 million soybean acres planted in 2015. On average, SCN costs American farmers \$14.70 an acre. These numbers would make people think that farmers were actively searching for solutions in their field and doing everything they can to prevent SCN damage. A recent SCN survey, completed by University of Missouri researchers, suggests that farmers may not be aware, or fully aware, of the SCN problems in their fields.

The survey showed that only 34 percent of farmers considered SCN a problem or were aware of its pres-

ence in their fields. Only 31 percent of the farmers knew how they were trying to protect their fields. This finding is concerning because 92 percent of the tested soil samples were positive for SCN, with 77 percent of those being rated as a medium or high infestation. That is a major problem when it comes to managing this pest.

“Knowledge is your first power against SCN,” said Melissa Mitchum, Ph.D., a plant sciences professor at the University of Missouri. “Know your SCN level, know your SCN type, know your source of resistance and know your options.”

Further complicating the SCN issue is a population shift that is occurring within the nematodes. Historically, farmers relied heavily on genetic resistance to the pest, but recently, traditional resistance

has been less effective.

“Each nematode has different genes,” Mitchum explained. “Nematodes that are unaffected by plant resistance pass along those genes to their offspring which can result in

a big problem.”

Rotating to non-host crops such as corn can help decrease future outbreaks, but this will only lower the populations and not eliminate SCN. The industry has recently



Tiny soybean cyst nematode can cause big trouble for soybean farmers. Diligent scouting is one way to guard against the negative impacts of SCN.



introduced a few nematicidal seed treatments that decrease the SCN's reproductive rates, but so far, none of the seed treatments are a stand-alone control for SCN. The main concern that farmers face is that there are no viable alternatives to the PI88788 resistance that is currently the main source of resistance in commercial varieties. At its recent meeting in Columbia, Missouri, the North Central Soybean Research Program voted to fund more research in the area of SCN resistance.

This information was presented at a recent meeting of the North Central Soybean Research Program

(NCSRP). The NCSRP is a farmer-led organization that invests checkoff dollars for research with regional implications. Twelve state soybean associations actively participate and fund NCSRP: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin.

For more information on North Dakota Soybean Council's sponsored 2016's SCN soil testing program, see page 34.

—Story by Allie Arp, NCSRP communications liaison, photos courtesy of NDSU



Traditional genetic resistance to SCN is losing its effectiveness.

NCSRP Summer Meeting and Crop Update

For its summer meeting, the farmer board of the North Central Soybean Research Program (NCSRP) went to college, visited a worm farm and talked research.

The NCSRP is a farmer-led organization that invests checkoff dollars for research with regional implications. Twelve state soybean associations actively participate and fund NCSRP: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin.

Hosted by the Missouri Soybean Merchandising Council, the 12-state board started its visit to Missouri with a discussion about the non-transgenic, high-oleic soybeans that are being bred in Missouri and the market opportunities they represent. This was followed the next morning with sessions, ranging from soybean breeding to weed resistance to cover crops, at the Farm Journal Soybean College. A tour of the University of

Missouri's worm greenhouses and worm farm to look at what's being done in soybean cyst nematode research wrapped up the tours and put the farmers in the right frame of

mind for the true purpose of their trip, soybean research.

On the third and final day of their trip, the board members reviewed research proposals and talk-

ed about the issues facing soybean yields in each of their respective states. One of the most popular parts of every meeting is getting a crop update from each director.



NCSRP director and North Dakota farmer Matt Danuser works with another attendee to determine the V and R stages of a soybean plant at the Farm Journal's Soybean College.

POWERING PRODUCTIVITY



Farmers never grow tired of seeing big numbers on their combine's yield monitors. Big yields can be the

salve needed for trying times with low prices. However, it can be equally important to maximize each acre's yield potential.

Milnor, North Dakota, farmers Ed Erickson, Jr., and his brother, Terry Erickson, were determined to do something different in their operation this year in order to improve their profitability and productivity. After researching the options and talking with company representatives at the Commodity Classic, the duo found precisely what they needed.

"We took the row units off of our planter and put on Precision Planting vSet units," Terry Erickson says. "Now, we can control every row."

Farming in North Dakota's prairie-pothole region, Ed Erickson says that farming every acre the same way wasn't conducive to long-term sustainability.

"We wasted a lot of seed, fertilizer and chemical on ground that just wasn't going to produce," Ed Erickson adds.

Years of yield maps helped reveal which acres were high yielding and which ones lacked

performance potential. Precision technology allows the Ericksons to plant variable seed rates to match the soil's potential while saving input costs.

"Mapping shows where we have had good crops. The planter acknowledges that, so each row unit will put down what it's supposed to," Terry Erickson says.

Ed Erickson says that, thanks to

more precise planting, corn-seed rates per acre dropped from a 34,000 plants-per-acre average to 28,000, resulting in substantial seed savings. Soil testing showed that many of their low-yielding spots had enough remaining fertilizer for the existing yield potential, so no additional input costs were necessary in those areas.

A little farm ingenuity is also

helping the Ericksons maximize their soybean yield potential. Hydraulic drives that were removed from the planter were added to their air seeder, allowing the Ericksons to vary which soybean varieties were planted in field in certain areas. Ed Erickson says that they planted soybean varieties with a higher-yielding potential in the high-performing areas and more "defensive" varieties in parts of the field that typically yielded little or nothing due to stresses such as high pH or root diseases. Population surveys in those difficult areas have the Ericksons optimistic about what they'll find this fall.

"Twenty bushels to the acre in those areas is better than zero," Ed Erickson says. "Before, we were planting the same variety across the entire field and getting nothing in those spots. Why put down an



Attention to detail can help farmers get the most out of every soybean acre.



NDSU research is targeting the factors that limit soybean yields.

input if you're not going to get a return?"

Mind the Gaps

Soybean yields have increased substantially since becoming a viable U.S. crop. Per-acre soybean yields increased from 13 bushels in 1930 to nearly 40 bushels in the mid-1990s, according to the U.S. Department of Agriculture Economic Research Service.

The National Agriculture Statistics Service says that the U.S. per-acre average was 48 bushels in 2015. North Dakota's 2015 state average was estimated at 32.5 bushels per acre.

The yield potential for soybean varieties has increased substantially, yet their promise is rarely realized on the farm. North Dakota State University (NDSU) Extension Agronomist Dr. Hans Kandel wants to know why. Kandel is working in cooperation with other NDSU researchers and extension staff on a three-year study, trying to narrow that yield gap and to

help identify limiting factors.

"If we are getting 50 bushels per acre with a variety in our field trials and farmers are only getting 33, what is the issue," Kandel asks. "What is the difference between what's attainable and what is being attained?"

Kandel and his colleagues are working to identify what's causing those gaps, but he says that multiple factors frequently limit soybean yields in North Dakota.

Variety Selection — Kandel believes that many farmers still don't pay close enough attention to seed selection. NDSU has information on more than 225 Roundup Ready® and 55 non-Roundup soybean varieties, with significant yield differences between top performers and less-productive varieties. Despite the gap, seed companies still offer the lower-yielding varieties, and farmers still buy them.

"It's important to select varieties most suited to each particular

farm," Kandel says. "This year, I saw more yellowing from iron deficiency chlorosis (IDC) than there should have been. That shows that some farmers weren't paying enough attention to the needs of that field."

Kandel says that issues such as IDC, soybean cyst nematode and phytophthora can limit yields, so it's increasingly important to select varieties with the necessary resistance genes.

Timely Planting — Data from the 2015 season show that farmers who were able to plant soybeans in a timely fashion saw better performance than those beans that were planted in late May. Weather conditions often dictate planting availability, but Kandel says that paying attention to the planting window is another way to get the most from the seed's potential.

Row Spacing — Row spacing can have a substantial impact on the soybean-yield potential. Research results have shown that in cooler, northern climates, 30-inch row spacing does not give the highest yields because canopy closure comes too late to take full advantage of solar radiation. Kandel says that, for North Dakota, when possible, narrower-row soybeans are often more productive.

Inoculants — Farmers who pay attention to inoculants are often rewarded with better yields. Kandel says inoculants can be particularly important in areas where soybean production is relatively new. Inoculants can help get soybeans off to a good start and help to ensure that proper nodulation is taking place in the soybean roots.

Managing Weeds — Weed pressure is a challenge for farmers throughout North Dakota. Kandel admits that zero tolerance for



weeds is difficult to achieve, however, he sees many soybean fields that are infested with weeds.

"I still see fields with problems. They will become a nightmare if weeds go to seed and increase the number of seeds in the seed bank," Kandel says.

Controlling weeds through multiple sites of action goes a long way toward achieving the best yields possible.

Water Management — Tile systems or water-control features are tools that farmers can use to manage water. Kandel says that there are many fields in North Dakota with areas that drowned out.

"Long-term, we need to look at how water is managed," Kandel says.

Other factors, such as seed population, planting depth and planting speed, can impact seed establishment. The three-year benchmarking project should help identify other bottlenecks that are holding soybeans back.

Farmers interested in participating in the benchmarking study can contact Kandel at hans.kandel@ndsu.edu or (701) 231-8135.

—*Story and photos by Daniel Lemke,*



Striving for Better

The history of farming reflects a nearly constant evolution. From the first ploughs slicing through

prairie sod to the latest technological advancements, farmers and agribusinesses have developed a parade of practices and techniques that are designed to increase efficiency and productivity.

In short, farming is a never-ending cycle of continuous improvement that continues today.

Through the development of new seed genetics, prescriptive nutrient-management plans, enhanced soil management or

more informed business decisions, farmers frequently push the envelope in their quest to be better. That drive helps them to be more productive and more sustainable in the face of ever-changing circumstances.

For some soybean growers, changes are made gradually and subtly over a period of years. For others, the drive to do better results in more disruptive changes.

Major changes are nothing new

for Wayne Fredericks.

Fredericks farms near Osage, not far from the Minnesota border, in north-central Iowa. He says that, about a quarter century ago, he stumbled into no-till soybean production, a practice that began a series of changes for his farm.

In 1991, Fredericks raised livestock as part of his operation. Hog-management demands and an early winter kept him from getting a plow in the ground before the

ground froze. Those conditions left him pondering what to do next.

Fredericks had read about a Minnesota farmer who was growing no-till soybeans. Fredericks talked to some nearby researchers who were studying the practice. Eventually, Fredericks was convinced to buy a drill and give it a try.

“At the time, it was an economic decision,” Fredericks admits. “There was less labor involved and fewer expenses. Then, I saw what it did environmentally.”

In 2001, Fredericks took another step to reduce tillage and began to strip-till all of his corn acres.

Today, Fredericks uses no-till and strip-till on all of his farms. At the farms he had when he adopted no-till in 1992, Fredericks says that the combined conservation-tillage practices have resulted in a soil organic-matter increase of 2.5 percent. He calls the organic matter “a pretty valuable asset, one with the ability to hold an additional 70,000 gallons of water per acre.”

Staying Covered

The last four years, Fredericks has experimented with cover crops. Last fall, half of his acres were seeded with cereal rye. Seed was flown on all of the standing corn in late summer. The rye sprouted and grew after the corn was harvested, overwintered and started growing again in the spring. Fredericks terminated the cover crop, which stood two feet tall or more, a mere three days before planting soybeans on the land.

“It’s worked very well. The soybeans we planted into the cover crops are looking great. You couldn’t tell anything was different just by looking at them,” Fredericks says.

A change that is noticeable as a result of Fredericks’ tillage practices is reflected in the soil. Fredericks says that, after three or four years of conservation tillage, his soil really changed. There was more



Water quality issues are driving farmers to do new things, including installing bioreactors (indicated by box and flag at right) to denitrify tile drainage water.



Iowa farmer Wayne Fredericks has made conservation a focus of his operation for over a quarter century.

structure and better overall health.

Fredericks compares the differences he saw in his soil to a cake mix versus a cake. The mix is dry, powdery and dense, similar to soil that is worked. Once the mix

is baked, the resulting cake has developed structure and is filled with tiny pockets of air. Fredericks says that, now, his soil has similar characteristics, allowing for better retention and absorption of both

moisture and nutrients

“Cover crops are a new experiment for us, but we know the benefits will come to owners of the land and the downstream users of our water,” Fredericks contends.

Fredericks also did a profitability analysis for some of the land he farms, looking at multiple years of yield data overlaid with the input costs to identify underperforming acres. The process helped identify a number of acres that were unprofitable to farm. Some of those acres, including several smaller and odd-shaped parcels, have been seeded to provide pollinator habitat and are enrolled in the continuous Conservation Reserve Program (CRP).

Technology in Practice

In June, a bioreactor was installed on Fredericks’ farm to capture nitrates in the water draining off his land. Fredericks’ bioreactor is designed to treat 36 acres of tile-drained farmland. Bioreactors utilize natural materials, such as wood chips, to support biological activity in order to reduce nutrients in the water filtering through it.

Fredericks, who is president of the Iowa Soybean Association, lives and farms in Iowa’s Rock Creek Watershed which has established nutrient-reduction goals. Fredericks’ bioreactor was the first of 25 planned installations in the watershed. They are part of a project that stemmed from farmer-led efforts and the Iowa Soybean Association’s technical expertise to develop the watershed plan. The goal is to reduce nitrates by 41 percent and phosphorous by 29 percent.

Fredericks says that the farm has been under constant water surveillance and testing for years. It has had a historical average of about 13.5 milligrams of nitrates per liter. The bioreactor was installed

in a field that had thigh-high cereal rye which sequesters nitrogen in the soil. Fredericks says that the water coming into the bioreactor now has about 4.5 milligrams of nitrates. Water leaves the bioreactor with nitrate levels so low that they can’t be accurately measured, reflecting the effectiveness of both the cover crop and the bioreactor.

Water Lawsuit

Water quality is important for all farmers, but the issue has been taken to a new level in Iowa where Des Moines Water Works has filed a lawsuit against three northern Iowa counties over high nitrate levels. The lawsuit claims that tile-drainage water is causing high nitrate levels in the Raccoon River which provides drinking water to about half a million people. Des Moines Water Works says that it cost the company about \$1.5 million to control the nitrates in 2015. Fredericks believes that efforts such as the Rock Creek Watershed plan are necessary for farming’s future. “With all of the public scrutiny on us over water quality, we need to show that we are trying to do better,” he says.

Having utilized conservation-tillage practices for more than 25 years, Fredericks knows that it can be a tough message to sell to farmers who are used to conventional farming. It’s even tougher to convince fellow growers to make the change. For him, the approach makes environmental and economic sense.

“I’ve heard concerns that it costs a lot to be environmentally sensitive,” Fredericks says. “I’ve had my yields and cost benchmarked against conventional tillage. I do as well or better than those doing conventional tillage, so I’ve never looked back.”

—Story and photo by Daniel Lemke, photos by Joseph L. Murphy, Iowa Soybean Association

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It's a Family Affair

Soil Health, Service and Stewardship

Tyler and Kyle take a look at their soils under soybean.

Shifting management practices on the farm isn't easy, especially when it comes to transitioning to

conservation tillage or including cover crops in the rotation. In the case of Bruce, Tyler and Kyle Speich who farm near Milnor, North Dakota, they've made the adoption of soil health-building practices look easy. Their transition to strip till and using cover crops have been somewhat under the radar despite their involvement with various agricultural groups and their high

visibility in the farming community. For people who don't know, Bruce serves on the Wild Rice Soil Conservation District board; Tyler is the Chairman of the North Dakota Soybean Council; and Kyle recently joined the North Dakota Corn Growers.

Adoption of soil health-building practices is popping up everywhere, especially by farmers who serve on

an agricultural board. They are using information from research that their groups or commodities fund and then applying it on the farm. In this case, Bruce has received information from his involvement with the soil conservation district and its work with the Conservation Cropping Systems Project in Forman. Tyler has acquired research results firsthand through technical reports and presentations with the North Dakota Soybean Council, and Kyle will obtain additional information as he gets more involved with the North Dakota Corn Growers. The farmers are also sharing what they learn with others by participating in NDSU research, field days and café talks as well as during day-to-day interactions with other farmers.

One soil health-building practice

that caught the Speichs' attention in 2007 was strip till. Because they farm both sandy and high-clay soil, they have to manage water retention by building organic matter and, at the same time, water logging by building continuous pores with roots and soil aggregates. On the sandy soil, the Speichs use a combination of strip-till and no-till which has worked well. They are now working on using strip till with their wetter, heavier ground. They feel that the inclusion of cover crops will make strip till easier in high-clay soils.

The Speichs have recently added cover crops to an already diverse rotation of soybeans, corn, sunflowers, wheat and alfalfa. This helps to build organic matter in the soils and to increase the ability to manage water by keeping a living root in the soil longer. Here's how the Speichs do it:

Research conducted by NDSU and co-funded by the North Dakota Soybean Council has found similar moisture (18 percent) and temperature (51°F) within the strips for strip till and chisel-plow management. While the moisture (29 percent) and temperature (45°F) between the strips under residue are similar to no-till (32 percent and 42°F). The Speichs are getting the best of both worlds: strips that dry out and warm up faster in the spring such as a chisel plow while, at the same time, keeping moisture between the rows for crops later in the growing season. They have the added benefit of residue, or "soil armor," that helps to reduce wind erosion and soil loss from the fields.



- They plant cereal rye (20-60 lbs/ ac) in the low parts of the field in the fall (post-harvest); the cereal rye overwinters; and then, they plant sunflowers or soybeans into a living cereal-rye cover crop in the spring. This technique is called “planting green” and is being tried by several farmers in North Dakota and on North Dakota State University research plots. The great thing about this approach is that cereal rye uses excess moisture from generally water-logged parts of the field in the spring. They are also improving drainage with the long, continuous roots of cereal rye. Trafficability is greatly improved because they have something green to drive on in areas where they could get stuck in the past. When asked what rate of cereal rye they prefer, the Speichs felt that 20 lbs/ac was too little to see the benefits while 60 lbs/ac was too much, making it difficult to strip till, so they will try 30 lbs/ac this year.
- After their wheat crop, they keep the field clean for two weeks to break the green bridge and then follow with a cover

crop. This works well for their system, especially because they have cattle. By planting radishes, turnips and cereal rye, they are keeping it simple and establishing roots that create continuous pores of different sizes for water movement into the soil. The cover crops also provide a food source for microbes and earthworms living in their soils, plus they add organic matter to help with water retention and to build aggregates. The cereal rye will over winter, and then, they have the option to “plant green” or to terminate the cereal rye prior to planting the following spring.

- The Speichs follow three years of alfalfa with wheat and then a cover crop. They graze the cover crop and then strip till corn into the residue. By doing this, they maintain the benefit of having the alfalfa root system in the soil building organic matter (lots of nitrogen) and aggregates. Grazing the cover crop following wheat adds more organic matter to the soil, making it easy to strip till corn with less inputs.
- The Speichs will try inter-seeding their corn this year on an irrigat-



Earthworms create large, continuous channels through the soil to help with water movement.

ed piece of land. With irrigation, they can drop the cover-crop seed (cereal rye, radishes and dwarf essex rapeseed) on the soil surface and apply water to get it growing. The cover crop will germinate under the corn but will not grow enough to compete with corn. When the corn is harvested, the cover crops will grow rapidly, and then, they can

graze their cattle on that food source. Corn stalks plus cover crops provide an excellent diet for cattle; the cattle will eat some of both to stay balanced.

These are just a few things the Speichs are doing with strip till and cover crops, and it’s working very well. However, the Speichs will be the first to tell you that they are not experts; they experiment with different practices to figure out what works best for their farm. One of the reasons that they feel their current approach is a good fit, and the one with which they are probably most proud, is that they are reducing soil loss from wind erosion. With this and other goals in mind, Bruce, Tyler and Kyle will continue to try new things and to adjust their approach to farming.

—Story and photos by Abbey Wick, NDSU Extension Soil Health Specialist.



Strip till corn into residue from three years of alfalfa and one year of wheat plus cover crop.

North Dakota Grower Participates in U.S. Soy's ASC Mission



Members of U.S. Soy Mission at the Gold Coin Feeds in Sri Lanka.

The Asian subcontinent (ASC), with 1.65 billion people, represents a whopping 23 percent of the

world's population. With the regional GDP average growth at greater than 5 percent and rising, this region is growing rapidly, providing an excellent opportunity for U.S. soy exports.

North Dakota Soybean Council director and soybean farmer Matt Gast of Valley City had the opportunity to travel to the ASC as part of a U.S. soy mission from July 29-August 6.

The U.S. Soybean Export Council (USSEC) hosted the 2016 qualified state soybean board (QSSB) mission which included activities in Colombo, Sri Lanka; Kolkata, India; and Delhi, India.

The delegation, including 13 representatives from state boards along with USSEC staff, participated in meetings and activities to create a greater understanding about the differences and similarities for the soybean markets in Sri Lanka, Bangladesh and India.

The QSSB team members started their trip in Sri Lanka on July 30 and 31, where they participated in an industry meeting and visited a feed mill, layer farms, broiler farms and chicken outlets. They also attended the Sri Lanka-U.S. Soy Alliance, a meeting that helped the U.S. soy representatives to interact with and learn more about the Sri

Lankan industry.

Two leading local industry members discussed the Sri Lankan industry's progress and growth, providing an overview of the country's market for U.S. soy, animal-feed operations, consumption patterns, possible applications for soy in human food and future growth opportunities.



Matt Gast (middle) and Jim Sutter, USSEC CEO (right), read product labels to understand local market requirements in Sri Lanka.

The team also visited a feed mill where they saw stocks of U.S. soybean meal. Visiting a modern broiler farm illustrated growth in the poultry industry.

"Mom and pop" grocery stores were the next stop. By contrasting these small stores to more modern, larger stores, the delegation had the opportunity to compare modern retail and customer preferences to various food and grocery products.

The mission continued on to Kolkata, India, on August 1 and 2.

Ten Bangladeshi industry members traveled to the city of Kolkata, near the border of Bangladesh, to meet the delegation. Five Indian crushers/soy traders also met the QSSB team and learned about the developments taking place in Bangladesh.

The team visited a new broiler feed mill that produces 96,000 metric tons (MT) per year and has plans to diversify into aquaculture



feed. During the briefing at the mill, the delegation learned about poultry growth and consumer demand, but noted that there is still plenty of room for growth because the per-capita consumption of chicken in India is still very low.

The QSSBs had the opportunity to interact exclusively with the Bangladeshi industry during the Bangla-U.S. Soy Alliance in Kolkata. Bangladesh will soon have four crush plants and several full-fat soybean-meal (FFSBM) production units which will add to the country's whole-bean consumption.

Following the Bangla-U.S. Soy Alliance meeting, the group went to an evening networking reception, which had attendees from the Bangladeshi industry members, QSSBs, USSEC, the U.S. consulate in Kolkata, and the East Indian industry representatives, helping the QSSB team to better understand Bangladeshi requirements as well as the East Indian industry.

The trip concluded with a visit to Delhi, India, from August 3-5.

The QSSB team attended a reception hosted by Scott Sindelar, minister counselor of agricultural affairs, Foreign Agriculture Services (FAS)/U.S. Department of

Agriculture (USDA), Embassy of the United States, New Delhi, at his residence.

About 65 participants attended this event, including representatives from ADM, Cargill, the Poultry Federation of India, the U.S. Grains Council (USGC) and U.S. food-grade soybean importers. These interactions helped the QSSB team to obtain perspectives from different industry stakeholders.

In Delhi, the team members were taken to McDonald's for lunch where they received much more than a taste of home. The meal provided insight about customers' changing food preferences, trends with India's rapidly growing younger population and price comparisons.

A trip through the countryside provided an excellent learning experience because participants observed Indian agricultural systems. The summer crop was in progress, and they witnessed many activities, including brick making and rice farming. Passing through Agra, which is an overgrown village, allowed them to compare Indian life in a metro city versus a small town.

On the last day of the trip, Mr. Sindelar and his team welcomed the group to the embassy, and they



Matt Gast with management and their family members after touring the Hi-Tech Feed Mill Ltd in Kolkata, India.

put together a presentation about the USDA's perspectives on the Indian market, helping the QSSB team to make assessments. Mr. Sindelar stressed that it pays to be patient in order to derive benefits from the Indian market.

As its final activity, the QSSB group listened to two presentations from the USSEC. The first one focused on the market assessment that was recently put together for the ASC region; the presentation contained information on demographics; regional strengths, weaknesses, opportunities and threats; current utilization; and future forecasts along with data about U.S. soy imports into the region. The second presentation centered on the USSEC's ASC program management, mission and goals; consultants' geographic positioning and the roles that they perform; return on investment (ROI) for dollars invested; how funds are distributed for projects/activities and a unified export strategy (UES), among other topics. This two-hour session helped tie up everything that the state participants observed at the marketplace during the seven-day trip.

The USSEC is a trusted ally,

working with the QSSBs as their global marketing arm to enhance market access for state-produced soy and soy products. The USSEC is a state's gateway to the international marketplace, providing timely and relevant information through the USSEC's proprietary network in 70 countries.

—Story by Jen Del Carmen, USSEC. Photos by USSEC



Matt Gast speaks about U.S. soy to Bangladeshi industry at the Bangla-U.S. Soy Alliance.



Matt Gast elated to see U.S. soy meal at the Gold Coin Feed Mill in Sir Lanka.

The Northern Food Grade Soybean Association Continues to Bridge this Region's Production with International Customers

Fall is a very busy season, not only for growers, but also for the companies that promote North Dakota food-grade soybean production. This region is very well known throughout the world and hosts many companies from Asia and southeast Asia to promote its unique strengths: production capabilities, processing facilities, and food-safety and traceability programs.

The Northern Food Grade Soybean Association (NFGSA), in conjunction with the North Dakota Trade Office (NDTO) and the North Dakota Soybean Council (NDSC), will host two separate Reverse Trade Missions from China and India. These trade missions typically last 5-7 days, and the buyers are pre-qualified in order to participate. China and India have a unique set of market opportunities which also come with market-access challenges.

In August, this region hosted 17 buyers from China. This event is an emerging opportunity for the U.S. food-grade soybean market. Just five years ago, Chinese buyers were not coming to the U.S. interested in food-grade soybeans. This emerging market for the food-grade soybean industry is one that NFGSA, NDTO and NDSC are aggressively pursuing. The demand from China for food of U.S. origin continues to grow their upper and middle classes.

In October, this region will host a Reverse Trade Mission from India. With help from the NDSC and the Minnesota Soybean Research and Promotion Council, 100 metric tons of food-grade soybeans were sent to India and distributed

to individual companies. Quality and production data will be recorded and shared about how North Dakota soybeans compare to India's domestic production.

In 2016, many growers decided to grow non-GMO soybeans on the

open market. In order to be successful and to market their crop for a premium, the growers will need to pay close attention when harvesting, handling and storing these beans. Segregation and cleaning the equipment is critical. For more information on the best practices for food-grade production or to contact a member company, please visit our website: www.nfgsa.org.

—Story by Northern Food
Grade Soybean Association,
photo by USSEC

“ The demand from China for food of U.S. origin continues to grow their upper and middle classes. ”



This past summer, NFGSA shipped five containers of North Dakota food grade soybeans to India to be distributed to soyfood manufacturers in that country. While in India as part of U.S. Soybean Export Council's (USSEC) U.S. Soy Mission in early August, Valley City soybean farmer Matt Gast, far left, had the opportunity to meet with some of the manufacturers who received food grade soybeans from North Dakota. These manufacturers were extremely impressed and appreciative of the soybeans they had recently received from North Dakota and Minnesota and very pleased to meet North Dakota soybean farmer Matt Gast.

Southeast Asia Buyer Conference Drums Up International Sales

Valley City, North Dakota, farmer Monte Peterson left the 2016 Southeast Asia U.S. Agricultural Cooperators Conference impressed. The event, also known as the Southeast Asia Buyers Conference, brings together soybean buyers and sellers from around the region.

“I’m always impressed with the amount of interest we get from buyers who want to visit with the farmer” Peterson says. “They want to understand the condition of the growing crop and what production issues there have been during the growing season. They want to know how we manage on our farms. These visits certainly make a difference in building preference for U.S. soy.”

Peterson took part in the confer-

ence which was held in the Philippines. The event was organized by the U.S. Soybean Export Council (USSEC), the U.S. Grains Council and the USDA Foreign Agricultural Service.

The conference is recognized as the premier agricultural event in the region. Over 120 companies with representatives from Thailand, Indonesia, Malaysia, the Philippines, Vietnam, Singapore, Myanmar, New Zealand and the United States participated. The three-day conference had more than 230 participants consisting of key U.S. soy and feed-grain customers from across southeast Asia. A large number of U.S. and international suppliers as well as regional and local representatives of international

trading companies also attended.

The Southeast Asia Buyers Conference has long established itself as a venue not just for information and knowledge gathering, but also as a business-networking platform to explore opportunities to negotiate and trade U.S. agricultural products. Twenty-two invited speakers, including grower leaders, USSEC senior personnel, and industry experts, shared their insights on a range of industry topics.

Peterson gave a presentation about his farm and what U.S. farmers are doing to be sustainable.

“Sustainability is becoming more important all the time,” Peterson says. “Buyers want to know what kind of footprint we are leaving on the earth. I talked about what I’m doing on my farm, including what USDA programs are conservation-driven, our practices for bigger yields, and what we are doing to lower our environmental impact

and protect our soils because, if we don’t protect them, we won’t be sustainable.”

Rosalind Leeck, the USSEC’s marketing director, emphasized the commitment of U.S. soy growers in applying sustainable soy-production practices for personal, social and commercial reasons. She also shared details about the U.S. Soybean Sustainability Assurance Protocol and explained how importers and end-users can benefit from this program.

Other topics discussed at the conference included world soy, corn and wheat updates; outlook and price scenarios for oilseeds; transportation and logistic trends affecting global agricultural trade; and much more.

A key component of the conference is to spur sales. Based on the feedback received by the USSEC, over 1 million metric tons of U.S. agricultural products, with an estimated value of USD \$300 million, were negotiated and traded at the conference, including over 300,000 metric tons of soybeans and 255,000 metric tons of meal.

“We try to gauge the effectiveness of promoting U.S. soy by the amount of business that takes place,” Peterson adds. “Having \$300 million in sales come about in such a short time has impact; that’s the bottom line.”

—Story by Daniel Lemke,
photo by USSEC



Monte Peterson, second from left, part of a panel at the Southeast Asia Buyer Conference in the Philippines.

Listen to Your Heart

Saturday, August 1, 2015, started like a normal morning for Sheila Long of

Bismarck, North Dakota, but just a few moments after getting out of bed, she knew something was wrong.

Overcome by nausea and chest pain that hit her in waves, Sheila agreed to let her husband take her to the emergency room. When the symptoms worsened and became more than she could bear, he called 911. When the EMTs arrived, she was initially diagnosed with hyperventilation and unexplained chest pain, but after

additional testing at the ER, doctors discovered that Sheila had suffered a heart attack. In the cath lab, doctors inserted a stent to clear an 80 percent blockage in one of her heart's key arteries.

As a 48-year-old fitness instructor and active walker, Sheila never thought a heart attack was possible. Looking back, Sheila now realizes that the warning signs were there...she just didn't listen to them.

Heart disease is the number one killer of women, causing one in three women's deaths each year and killing approximately one woman every minute. However, most women don't recognize their risk. To make matters worse, the symptoms of heart attack can be different for women and are often misunderstood.

"I always thought I'd have this left-side pain with left arm pain and you'd pass out, and that didn't happen at all," Long explained. "It was in the dead-center of my chest. When people say it feels like an elephant sitting there, that's exactly what it feels like."

One of the best ways for women to take charge of their heart health is to schedule a Well-Woman Visit with their doctor. A Well-Woman Visit is a scheduled prevention check-up to review a woman's overall health so that her doctor can measure blood pressure; check cholesterol; and look for signs of heart disease, stroke, and other illnesses. It is a separate visit from other appointments for specific sicknesses or injuries. For most women, but not for all, a Well-Woman Visit has no additional costs because of the Affordable Care Act, so check your insurance plan for preventive-

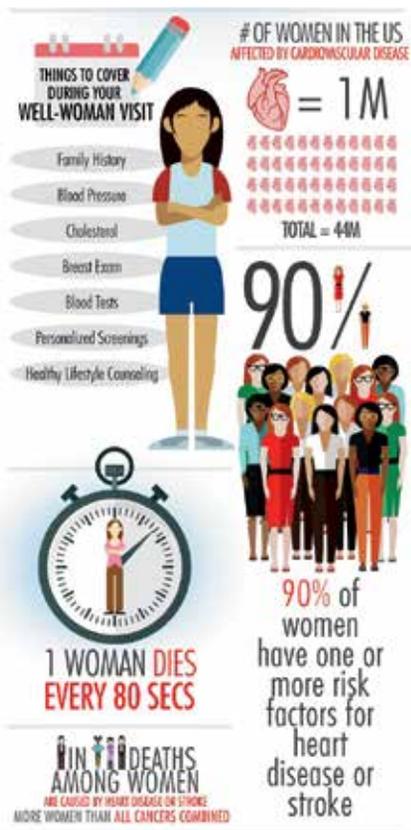
service coverage before scheduling your visit.

In addition, the American Heart Association outlines simple steps to "Go Red" in North Dakota and to help fight heart disease among women:

- **Get Your Numbers:** Ask your doctor to check your blood pressure, cholesterol and glucose.
- **Own Your Lifestyle:** Stop smoking, lose weight, be physically active and eat healthy. Did you know that consuming 25 grams of soy protein a day, as part of a diet that is low in saturated fat and cholesterol, may reduce the risk of heart disease? In 1999, the U.S. Food and Drug Administration (FDA) announced that incorporating soy protein into the daily diet helps fight coronary heart disease.
- **Raise Your Voice:** Advocate for more women-related research and education.
- **Educate Your Family:** Make healthy food choices for you and your family. Teach your kids the importance of staying active.
- **Donate:** Show your support of the Go Red for Women movement in North Dakota by attending the Go Red for Women Ladies' Night Out event on November 18 in Bismarck. Get event information and details at www.GoRed-Bismarck.org.

For more information about women and heart disease, Go Red for Women and the American Heart Association, visit GoRedBismarck.org.

—Story and infographic by Chrissy Meyer, American Heart Association





Keep Warm This Harvest With Favorite Fall Recipes

When the leaves turn and fall to the ground, it's time to put away the flip-flops and break out the sweaters. As the days become shorter and the fireplace beckons, it's a great time to warm your mind, body and soul with rich, delicious chili and soups. There are many reasons

why soy should be a key ingredient in any meal. Soy is rich in protein, fiber, vitamins, minerals and isoflavones, which are plant-derived compounds. Soy protein has also been shown to lower LDL (bad) cholesterol, to improve heart health and to reduce the risk of

heart disease.

The great thing about chili and soups is that they are relatively easy to make, can contain lots of veggies and are filling without weighing you down. It is easy to use your favorite chili or soup recipes and add soy protein; add shelled edamame, or canned tan or black soybeans (rinsed and drained) instead of the typical beans listed in recipes. If reducing saturated fat is important, use textured soy protein for half of the ground beef. Just add the soy protein dry; it will rehydrate and take on the recipe's flavor. This

substitution is a great way to sneak in soy protein.

The holidays are right around the corner. If you are contemplating pumpkin pie for dessert, try the pumpkin tofu recipe. It is delicious with the added benefit of adding soy protein to dessert!

Enjoy the crisp air, cozy sweaters and warm kitchens. Start creatively thinking about how to add heart-healthy soy protein to your family's favorites.

—Story, recipes and photos by
Linda Funk, The Soyfoods Council

Black and White Chili with Wagon-Wheel Pasta



Ingredients

- 2 tablespoons soybean oil
- 3 garlic cloves, minced
- 2 cups chopped onion
- 1 cup chopped green bell pepper
- 5 teaspoons chili powder
- 2 teaspoons dried oregano
- 1½ teaspoons ground cumin
- 3 (15-ounce) cans black soybeans, rinsed and drained
- 2 (14.5-ounce) cans diced tomatoes with garlic and onion
- ½ teaspoon salt
- 12 ounces wagon-wheel (or other shaped) pasta
- ¾ cup soy sour cream

Directions

Heat the oil in a large pot over medium-high heat. Add the garlic, onion and bell pepper; cook, stirring occasionally, until the

vegetables start to soften, 5-6 minutes. Stir in the chili powder, oregano and cumin; cook 30 seconds until fragrant. Add the canned soybeans and diced tomatoes; bring the mixture to a boil. Reduce the heat to medium-low and simmer, covered, 40-45 minutes or until slightly thickened. Remove from the heat, and stir in the salt. Meanwhile, bring a large pot of lightly salted water to a boil. Add the wagon wheels, and cook according to the package directions. To serve: divide the wagon wheels among 6 bowls and then top with the chili. Garnish each serving with 2 tablespoons of the soy sour cream.

Yield 6 servings.

Tofu Pumpkin Pie with Whipped Tofu Topping

Pie Crust Ingredients

- 1½ cups all-purpose flour
- ½ teaspoon salt
- ⅓ cup shortening
- 2 tablespoons water
- ½ teaspoon vinegar

Creamy Tofu Pumpkin

Filling Ingredients

- 12 oz. extra-firm silken tofu
- 2 cups pumpkin puree
- ¾ cup granulated sugar
- 2 tablespoons soybean oil
- 2 tablespoons dark molasses
- ½ teaspoon salt
- 1 teaspoon ground cinnamon
- ½ teaspoon ground ginger
- ¼ teaspoon ground nutmeg
- ¼ teaspoon ground cloves
- ½ teaspoon vanilla extract

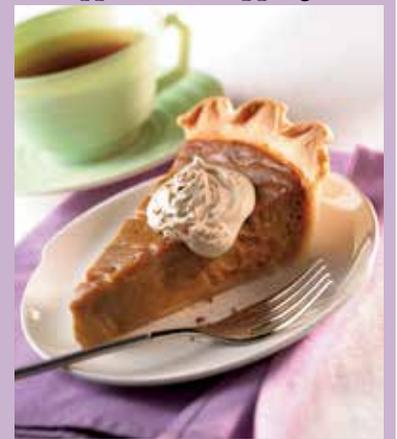
Whipped Tofu

Topping Ingredients

- 1 cup soft, silken tofu
- 4 tablespoons soybean oil
- 2 tablespoons dark molasses
- ⅛ teaspoon salt
- 1½ teaspoons vanilla extract

Directions

Preheat oven to 425°. Cut together the flour, salt and shortening; set aside. Combine the water and vinegar, and pour



into the flour-mixture; stir with a fork until the mixture forms a ball. Roll the mixture into a disk. Line a 9-inch pie pan with the pastry; bake the pie shell for 5 minutes. Take the shell out of the oven.

Reduce the oven temperature to 350°. Mix all filling ingredients in a blender. Pour the filling into the baked pie shell. Bake for 1 hour; cool completely on a wire rack. Chill the pie at least 2 to 3 hours.

Blend all ingredients for the whipped tofu topping until they are smooth and creamy. Chill the topping at least 2 hours. Serve it with the pumpkin pie.

Yield 1 pie.

DATA DRIVEN DECISIONS

Business Decisions

Farmers also need to look at the financial data that they are gathering to make informed decisions because today's decisions can have a long lasting impact.

Andrew Swenson, North Dakota State University (NDSU) extension farm and farm-resource management specialist, acknowledges that farmers have had a couple difficult years in a row because of low commodity prices. Some farms are in difficult financial position while others have shielded themselves against the economic storm.

"Where the farm is at depends a lot on the individual producer," Swenson says. "Decisions made in the past can handcuff you for the future."

"If farmers can consistently make sound decisions, they'll be less apt to get into difficult positions," Swenson adds. "If they can be just as intense with their production,

Whether it's the pursuit of bigger yields, the desire for greater stewardship or the need for increased

profitability, farmers make many decisions for the health of their operation. In most cases, growers have a lot of information to help them make decisions.

Farmers generate a tremendous amount of information. They may gather yield information from their combine, track seeding data from their planter and get soil maps from their agronomist. Sometimes, making sense of it all requires a little help.

"Farmers typically collect a lot of data from a wide variety of sources, but it's hard for them to store and present that information in a cohesive manner," says Shep Whitcomb, product marketing manager for FarmLogs, a Michigan-based farm-management technology company.

Managing Data

Whitcomb says that farmers often find it difficult to manage all of their information. Systems such as FarmLogs help growers to make sense of the data they are collecting while gathering some of its own. Whitcomb says that FarmLogs also collects National Oceanic and Atmospheric Administration (NOAA) weather data to track

historical, daily and cumulative rainfall as well as growing degree days. He says that one of the company's key differentiators is that it also taps into six years of wide, dynamic-range, vegetative-index (WDRVI) field imagery along with soil maps in order to put together management maps.

"We use external data sets that may not be easily accessed to build analytics that help farmers make decisions," Whitcomb adds.

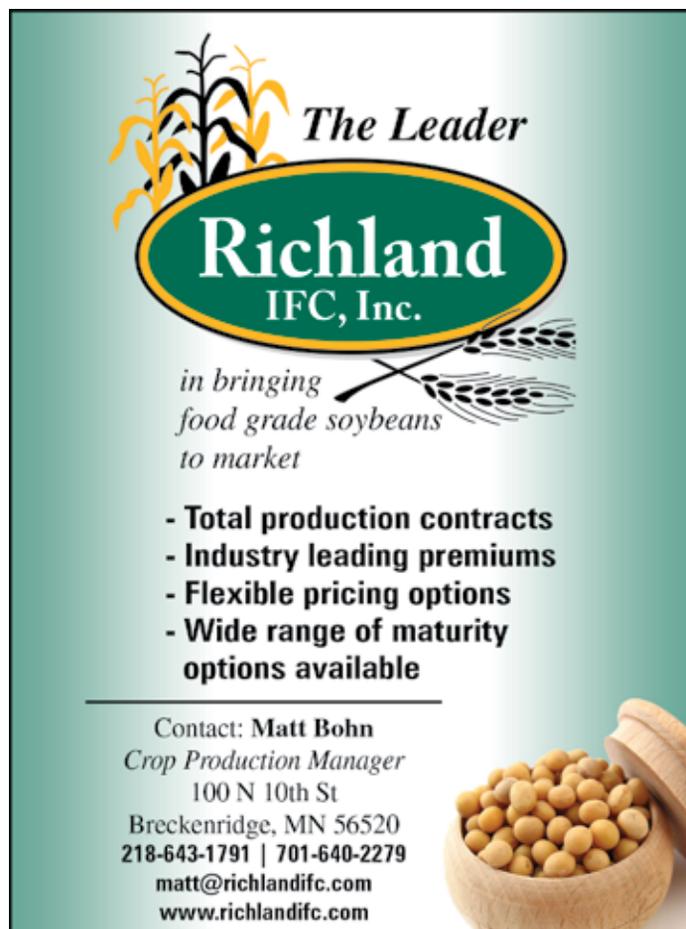
While many farmers aren't taking advantage of all of the data that they generate, advancements are happening.

"Variable-rate technology and even sub-field management zones are gaining traction. There's a tremendous amount to be gained by managing that way," Whitcomb says.

Whitcomb points to split-nitrogen applications for corn as an example of how technology can help farmers. Understanding nutrient needs and availability at different times of the year can help growers maximize the money they spend on inputs and, ultimately, impact their profitability.

"The beauty of a management system is that you can take varied

sources of data that may not be useful by themselves, secure it, simplify it and then provide information that's easily understood," Whitcomb says. "That's how we can benefit farmers most on a daily basis."



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financial and marketing decisions when times are good, they'll likely be able to avoid some stress in the down times."

Swenson says that, on many farms, working capital has eroded. Some growers had difficulty securing operating loans for the 2016 crop year. Over the summer, occasional price rallies have offered opportunities for farmers to make some profit, but overall, tough circumstances remain on many farms.

"When we have difficult times, it means we're, often, having a difficult time meeting our financial obligations," Swenson says. "In this situation, cash is king. It's important to do anything we can to minimize cash outflow and maximize what's coming in."

Make a realistic projection of cash flow, and use that information as a guide for what needs to be done. Challenging times require farmers to take a hard look at their operation, and Swenson says everything should be on the table. A



Managing financial data can help farmers make good decision for long-term profitability.

strong balance provides the means to weather a downturn in the farm economy. Debt can be restructured, and/or assets can be mortgaged to overcome a cash-flow crunch. There are fewer options with a weak balance sheet.

Swenson says that there is no

silver bullet for surviving economic crunches because each farm has a unique situation. However, there are some areas where changes could be made to achieve a better financial position.

Restructure debt — Depending on the lender's willingness, short-term debt can, sometimes, be restructured and amortized over a longer period of time. In some cases, paying the interest only could help with short-term cash flow.

Minimize living expenses — While not typically as impactful as some of the larger farm expenses, living costs contribute to the farm's overall financial position. Saving money here helps.

Evaluate the asset base — Excess capacity could lead to cash-generating opportunities. For example, farmers with excess harvest capacity could do custom harvesting to generate income. Also, equipment that is unused or unnecessary could be sold to generate cash.

Selling land to reduce debt obligations and/or to provide cash is an option, especially if the land can be rented back.

Swenson cautions farmers to

thoroughly consider the effect that selling equipment and land assets will have on future production and revenue.

Cut operating costs — Swenson says that it can seem like an easy decision to cut inputs such as fertilizer, but fertilizer can dramatically influence yields and profitability.

"In evaluating farm records, we have found that one of the key differences between successful farms and those that are less successful farms is yield," Swenson says, "so you want to be judicious about cutting inputs that have a direct impact on yields."

Swenson says that farmers may be able to renegotiate land rents, although renegotiations can be a dicey proposition. Farmers may risk losing the land and the income that it can generate.

Challenging economic times put pressure on farm operators, but challenges may also offer opportunity. For individuals on solid financial footing, Swenson says that there may be potential to find discounted land and equipment.

—Story by Daniel Lemke, photos courtesy of United Soybean Board



More farmers are relying on data they're gathering to help make sound production decisions.

Navigating the System

In the late 1990s, rising water from Devils Lake Claimed a good portion of Aaron Newcomb's

Ramsey County farmland.

"The water kept rising and eventually it took over," Newcomb says. "At the same time, the cattle market plummeted. There was no pasture and no hay, so I had to sell the herd."

Newcomb was forced to sell his cow-calf operation. Because the farmland not covered with water was low ground, he enrolled the majority of it in the Conservation Reserve Program (CRP), except for a few acres that stayed in corn and soybean production. That ground is currently planted with soybeans but was recently approved for CRP inclusion.

Newcomb received assistance with the enrollment process from

Brandon Meyer, one of eight Farm Bill specialists located across the state. The specialist's role, according to North Dakota Association of Soil Conservation Districts (NDASCD) Executive Director Brian Johnston, is to help the Natural Resources Conservation Service (NRCS) get voluntary conservation programs contained within the Farm Bill on the ground in North Dakota.

The specialists used to be funded by conservation groups, making many people in the agriculture community uncomfortable. The result was the formation of a public-private partnership that brought money from farm and conserva-

tion groups together to fund the specialists. Many of the state's largest agriculture and conservation groups support the specialists who are supervised by the NDASCD.

"There had been some animosity between groups in the past," Johnston says. "Much to my delight, it has flowed well. Groups have brought forward funding and good will, allowing my association to run the program."

A wide diversity of groups has contributed to the partnership that is now entering its second year. Supporters include the North Dakota Game and Fish Department, the North Dakota Natural Resources Trust, the North Dakota Grain Growers Association, the North Dakota Farm Bureau, Ducks Unlimited, Pheasants Forever, Delta Waterfowl, the North Dakota Wheat Growers Association, the U.S. Durum Growers Association, the North Dakota Corn Growers Association and the North Dakota Soybean Growers Association.

Meyer, who serves the Devils Lake area as a farm-bill specialist, has seen increased farmer interest in

conservation programs, including CRP, wetland easements and the environmental quality incentives program (EQIP). His role is to help farmers and landowners determine which programs are the best conservation and economic fit.

"Farmers are the main drivers," Meyer says. "Conservation is always in the back of their mind. A lot of them are sportsmen as well, but they have to find the right balance because each farm is different."

Johnston says that the specialists provide a broad range of assistance, including conservation plan development, technical assistance and help with program applications. They're also responsible for farmer visits and communication outreach.

The partnership appears to be working because requests for service from the specialists are high. Johnston says that, among the services provided in June alone, specialists assisted with 43 applications for assistance, did 46 contract modifications, participated in 75 workshops and conducted 23 site visits.

For farmers who have questions about their conservation-program options, Johnston says that contacting the specialists is a good place to start.

"We have no agenda," Johnston adds. "We don't care if it's duck nesting habitat or CRP. We encourage farmers to visit with the farm-bill specialists to see what's best for them. We want to give producers a full picture of what is available to them."

For more information or to connect with a farm-bill specialist in your area, contact the NDASCD at (701) 223-8518.

—Story by Dan Lemke,
photo by Staff



Farm Bill Specialists like Brandon Meyer (standing at left) work to help farmers navigate conservation options contained in the Farm Bill. Specialists like Meyer participate in outreach activities, including Farm Bureau's experience agriculture event.



Thirteenth Annual Golf Tournament

Thank you for making the thirteenth annual golf tournament 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 funds necessary to continue policy advocacy work in Bismarck and Washington, D.C. We're proud of our past successes and are continually working to make things better for soybean growers throughout North Dakota.

For more photos from the tournament, visit facebook.com/NorthDakotaSoybeanGrowersAssociation.

Congratulations to our tournament winners:

First Place: Bob Green, Scott Mitchell, Jay Mitchell and Joel Mitchell

Second Place: Mural Pollert, Matt Schwarz, Jeff Williams and Brett Williams

Third Place: Jeff Romsdal, Calvin Leyendecker, Steve Manley and Steven Pranke

Congratulations to our contest winners:

Longest Putt #7: Tom Levos

Longest Putt #18: Curt Marshall

Longest Drive #5: Mike Udem

Longest Drive #14: Seth Udem

Closest to Pin #3: Reggie Soholt

Closest to Pin #11: Ryan Johnson

Thank you to our tournament sponsors.

Hole Sponsors: AgCountry Farm Credit Services, American Federal Bank, BASF: The Chemical Company, Bayer CropScience, Brushvale Seed, Bremer Insurance Agencies, Crary Industries, DTN—The Progressive Farmer, DuPont Pioneer, Dyna-Gro Seed, Eide Bailly, FMC Ag Products, Mosaic Company, Mustang Seeds, NorthStar Genetics, National Biodiesel Board, Proseed, SB&B Foods, SK Food International (A Healthy Food Ingredient Brand), SK Soil Solutions, Titan Machinery

Lunch: BNSF Railway

Dinner: N.D. Soybean Council

Welcome Bag: Minnesota Soybean Research and Promotion Council

Golf Balls: Asgrow

Signs: D-S Beverages

Tees: Eide Bailly

Player Carts: American Ag Network

General: I-29 Trailer Sales, Advanced Grain Handling Systems, Pride of Dakota, Richland IFC

Two NDSGA tournaments will be scheduled for 2017. The Jamestown tournament is scheduled for July 25, 2017. The Fargo-area event will be in August. More information will be posted shortly at ndsogrowers.com/events.

—Story and photos by Staff



Peterson Appointed to USSEC Board of Directors

Monte Peterson of Valley City, North Dakota, was recently appointed to the U.S. Soybean Export Council (USSEC) Board of Directors; he is representing the American Soybean Association (ASA). "I'm excited to continue the critical work of international market development in my new role on the USSEC board," said Peterson.

The USSEC board is comprised of directors who are assembled from two classes of USSEC membership: the founders and domestic industry classes. The organization's third class, the international industry class, does not have seats on USSEC's board. The USSEC's founding members, the United Soybean Board (USB) and the American Soybean Association (ASA), appoint the founders class of board members. The USSEC's exporter and allied industry members elect the domestic industry class of

board members.

This year, both the ASA and USB had the opportunity to appoint two directors for 2-year terms, which the organizations do each year to fill the four positions that the USB and ASA each hold. This year's appointments resulted in three new appointments and one reappointment. They are as follows.

Newly Appointed

- Todd Gibson, USB Board Member; Norborne, Missouri
- Monte Peterson, ASA Board Member; Valley City, North Dakota
- Doug Winter, USB Board Member; Mill Shoals, Illinois

Reappointed

- John Heisdorffer, ASA Board Member; Keota, Iowa (for a second 2-year term)

In mid-July, annual elections for the USSEC's domestic class

concluded with one newly elected director and three reelected directors.

Newly Elected (Exporter)

- Chris Arnold, The Scoular Company; Omaha, Nebraska

Reelected (Allied)

- Sharon Covert, Illinois Soybean Association; Tiskilwa, Illinois (for a second 2-year term)

Reelected (Exporter)

- Brandon Bickham, The DeLong Company; Clinton, Wisconsin (for a third and final 2-year term)
- Jim Traub, Clarkson Grain Co; Gordo, Illinois (for a third and final 2-year term)

USSEC Board Members Remaining Until Next Year's Board Election/Reappointment Cycle

- Derek Haigwood, USB Board Member, Term 1, ends 2017
- Jim Miller, ASA Board Member, Term 2, ends 2017
- Kevin Scott, ASA Board Member, Term 2, ends 2017
- Aaron Skyberg, SK Food International, Term 2, ends 2017

- Jimmy Sneed, USB Board Member, Term 2, ends 2017
- John Wright, Owensboro Grain Company, Term 3 (final), ends 2017
- Don Wyss, Indiana Soybean Association, Allied Sub-Class, Term 1, ends 2017

Board Members Departing the USSEC Board this Year

- Laura Foell, USB Board Member
- John Cassidy, Purdue Grain & Oilseed, Exporter
- Bob Metz, USB Board Member
- Ron Moore, ASA Board Member

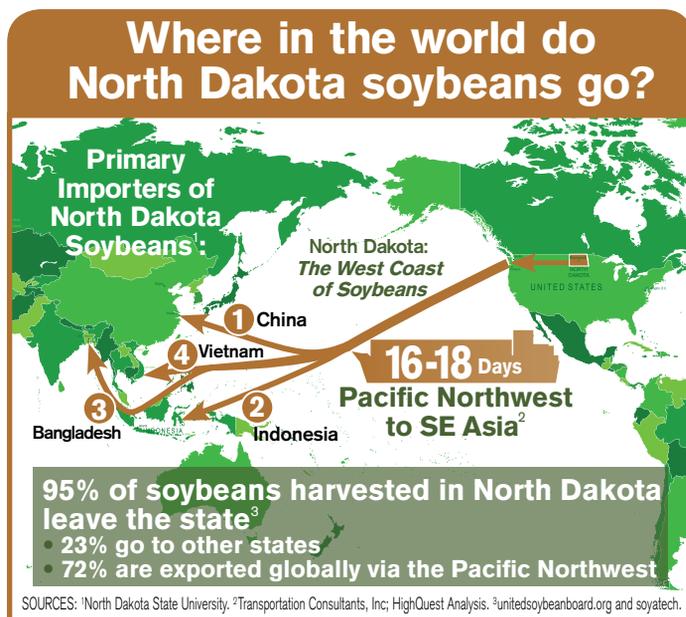
The USSEC welcomes its new board members and thanks the retiring board members for their service.

The official transition took place at the USSEC's annual meeting in August. At that meeting, Miller was elected chair, and Haigwood was elected vice chair. Covert was re-elected secretary, and Traub was elected treasurer.

—Story courtesy of USSEC, photo by Staff



Monte Peterson



New Rail Regulations Proposed

The Surface Transportation Board (STB) has proposed new regulations regarding competitive switching on railroads which, if adopted, would give shippers that are served by only one major railroad the option to seek competing bids for access to a second Class I railroad nearby without facing hefty fees.

Railroads play an important role in moving soy products in North Dakota and across the U.S.

The proposed rule responds to a petition for rulemaking that was submitted by the National Industrial Transportation League (NITL). The STB is now granting, in part, the NITL's petition for new regulations and is putting out proposed regulations for comments. The American Soybean Association (ASA) will work with agricultural industry partners to analyze the proposed rule and potentially submit joint comments.

In addition to the proposed rule on competitive switching, the STB is working on separate action to expedite the consideration of rail-rate dispute cases and the implementation of the STB reform and reauthorization bill enacted by Congress.

ASA Scholarship Available

The ASA is looking for high-school seniors who are interested in pursuing agriculture in college.

The ASA is offering a \$5,000 one-time scholarship award to a high-school senior who plans to pursue agriculture as an area of study at any accredited college or university during the 2017-18 academic year. The scholarship

is managed by ASA and is made possible through a grant from the BASF Corporation. Interested candidates may apply online through November 21, 2016, at www.soygrowers.com.

The scholarship is presented in \$2,500 increments per semester. The student must be a child or grandchild of a current ASA member, maintain successful academic progress, and be in good standing with the college or university to receive the full scholarship amount.

The final selection will be made in December.

Lifetime Achievement Awards

The ASA is looking for help to identify outstanding grower leaders for the 2017 ASA award and recognition program. If you know someone who goes the extra mile for the soybean industry and amplifies truly outstanding leadership, the ASA wants to hear about it and to recognize the person for his/her hard work. Three major awards will be presented:

- Lifetime Achievement Award: Association Focus
- Lifetime Achievement Award: Membership Focus
- Special Meritorious Service

For more details or to nominate someone, visit the ASA's website at www.soygrowers.com. All nominations must be received no later than Friday, November 11, 2016.

The awards will be presented at the ASA Awards Banquet on Friday, March 3, 2017, during the Commodity Classic in San Antonio, Texas.

Final Venue Set for WOTUS Challenges

The 11th Circuit Court of Ap-

peals has denied the states' latest bid to have their challenges to the Waters of the U.S. (WOTUS) rule heard at the district-court level where they think they'd find more receptive audiences.

This ruling means that the 6th Circuit Court of Appeals, based in Cincinnati, will hear the cases challenging the EPA's Clean Water Rule, generally known as WOTUS. States had urged the 11th Circuit to take the appeal, arguing that the issue does not qualify under a provision of the Clean Water Act that allows certain challenges to leapfrog district courts and head straight to appellate court. The 6th Circuit, where appellate court challenges have been consolidated, has ruled that the issue belongs with it.

"It would be a colossal waste of judicial resources for both this Court and the Sixth Circuit to undertake to decide the same issues about the same rule presented by the same parties," the panel wrote.

Last fall, the 6th Circuit Court of Appeals placed a preliminary injunction on implementing and enforcing the WOTUS Rule in all 50 states, so it has not taken effect. Oral arguments before the 6th Circuit have been set for the spring of 2017.

Survey Reveals Cover-Crop Data

The Conservation Technology Information Center (CTIC) has released its spring survey on cover crops, providing new information about cover-crop adoption.

According to the CTIC, "Insight from 2,020 farmers from across the country reflected enthusiasm for cover crops and—for the fourth year in a row—found a

yield boost in corn and soybeans following cover crops."

The following items are among the study's findings:

- Acreage planted with cover crops continued its steady rise among survey participants, reaching an average of 298 acres per farm in 2015, and is projected to grow to a mean of 339 acres in 2016. Those figures are more than double the acreage that survey participants said they planted in 2011.
- For soybeans, the average yield-gain increased from 0.1 bushel per acre after a single year of cover crops to 2.4 bushels after four years of cover crops.
- A majority of respondents—52 percent—reported that their soybean yields always or often increase after a cover crop of cereal rye; less than 4 percent of them said that their yields sometimes or always decreased after rye.
- Cereal-rye cover crops also proved helpful in other ways, with 82 percent of farmers reporting that the rye helped with weed management, including 26 percent who found that it also helped with tough, herbicide-resistant weeds.

The survey was conducted in March 2016 by the Sustainable Agriculture Research and Education Program and the CTIC with help from the American Seed Trade Association and Purdue University.

—Stories by Staff

Getting to Know the Grower



Matt Gast
Valley City, North Dakota

Tell us about your farm.

I farm with my father-in-law and my brother-in-law. We grow corn and soybeans.

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

No, I didn't start farming until after college.

How and why did you get involved with the

North Dakota Soybean Council?

It was something I was interested in, and I was nominated by someone in my county.

Has serving on the North Dakota Soybean Council been beneficial to you? Why?

Yes, it has shown me the different uses for soybeans and has shown me that we need to promote soybeans even more.

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

Commodity prices

What do you like to do outside farming?

I like to spend time with my family, go to the lakes, golf and cheer on NDSU Football. Go Bison!

Why are soybeans a part of your crop mix?

They are good for rotation with corn and because of the demand for soybeans.

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

The John Deere Exact Emerge Planter

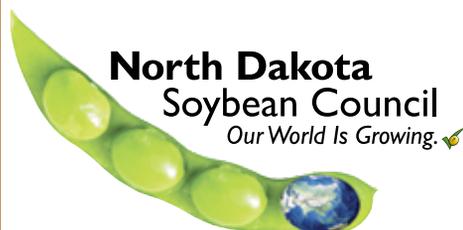
— *Story by Staff, photo by Wanbaugh Studios*

2016 SCN Testing Program



The North Dakota Soybean Council is sponsoring a Soybean Cyst Nematode (SCN) soil-testing reimbursement program again in 2016. The program will be coordinated through the North Dakota State University Cooperative Extension Service.

How it Works: Two thousand SCN soil-sample bags will be available at NDSU County Extension offices in 2016. Each grower can request up to three bags, on a first-come, first-serve basis. Sample bags will have submission instructions and be coded for reimbursement. Once submitted, the grower will receive the results directly, and the North Dakota Soybean Council will cover the bill. **For more information, contact your local Country Extension Agent.**



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Jenny Rohrich
Ashley, North Dakota

Tell us about your farm.

Rohrich Farms was originally started in Zeeland, North Dakota, in 1946 by my husband Mark's grandparents, Claude and Katie Rohrich. We continue to farm in the very same location with Mark's parents, Thomas and Mary, and his brother, Allan, and wife Becky. We are currently raising the fourth generation. We grow four primary crops: soybeans, wheat, corn and sunflowers.

Have you always been involved with farming?

I grew up as the daughter of a butcher, and was born and raised in California. I spent much of my youth in my family's second-generation butcher shop in Chico. I went to school in a smaller farming community and was actively involved with 4-H, especially showing cattle. It wasn't until college that I was really exposed to a world far removed from agriculture. I joined social media in order to give people perspective about how meat products end up in the grocery store.

I met Mark through Twitter. We kept in contact for several months before he came to California to meet me in January

2012. When I visited North Dakota for the first time in March 2012, I decided to move here, which I did that summer. By November, Mark and I were engaged. We got married in September 2013 and just recently completed building a home in our small community of Ashley.

You are very active in agricultural communications. Tell us about some of your involvement.

I have no formal background in communications, so I am thankful to be where I am today. In 2012, I started a blog called Prairie Californian. What started as a place to share about my life in North Dakota with my friends and family has evolved into a space to bridge the gap between those far removed from agriculture and us by giving people daily insight about our farm.

Mark and I participated in Sygenta's Voices 4 Wheat program where we shared about our wheat-growing season. In 2014, I was a recipient of the Institute for Food Technologists Media Award for Excellence in Consumer Journalism. In 2015, I was a part of the National Wheat Foundation's Wheat Advocate program where I represented the industry in New York City at an annual food blogger's conference. I was also part of the Best Food Fact's #Taste15 blogger program where I got to travel with other food bloggers in order to learn and to have conversations about where our food originates. I am a current member of the American Soybean Association's Advocacy

Communications and Training team where I help with efforts both online and offline.

I am a regular contributor to the Huffington Post as well as a former contributor to Agriculture.com and Successful Farming. I've had features in publications such as Farm Progress, the American Soybean Association Magazine, the National Sunflower Magazine, and the Farm and Ranch Guide. I've also been given unique opportunities, such as doing a Reddit AMA (Ask Me Anything) where I spent an hour online answering farm-related questions.

What do you like to do outside farming?

Outside of blogging, I can be found with a camera in my hand, capturing the world around me. I love the challenge of bringing culture to the prairie through a variety of culinary creations in my new kitchen, and I love to travel with Mark. We've had the opportunity to visit Singapore; Cambodia; Thailand; and, recently, Australia. We also love to travel via our Harley. Putting three to four thousand miles on in a trip, exploring the rural countryside, is the perfect vacation for us.

Why is it important for farmers to communicate with each other and non-farmers?

There is so much information being shared and so many conversations being had about farming by non-farming people. Through my experiences, I've witnessed the power that engaging in a simple conversation can have to change people's perspectives about

food sources. I truly believe that being open and willing to have a conversation about what we do has the ability to make an impact in a world that is disconnected from agriculture.

What has been the biggest adjustment moving from California to North Dakota?

Where we live shapes and influences us. Until you've lived here, capturing the "essence" that is North Dakota is extremely hard to sum up in words, but there is no denying that North Dakota has stolen a part of my heart.

Everyone talks about "North Dakota nice" which is certainly a thing. People in North Dakota are known for their friendliness. I have had to get used to saying "hi" to someone on the street or in the grocery store as well as waving to people as they drive down the street.

What's the best thing about fall in North Dakota?

Fall has always been one of my favorite seasons, even when I lived in California. There is just something about the changing seasons and the colors of all the leaves. Moving to North Dakota and marrying into a farm family, I get to experience a whole new love in fall: harvest. It is one of the busiest, but most fulfilling, times of the year. We get to harvest the crops we've been praying for and watching grow all year long. With a little luck from Mother Nature, we can truly experience the fruits of our labors.

—Story by Daniel Lemke, photo submitted by Jenny Rohrich

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