



INSIDE Harvest: What a Difference a Year Can Make Page 18

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Nancy Johnson, Executive Director nancy.johnson@ndsoygrowers.com 1555 43rd St. South, Suite 103 • Fargo, ND 58103 (701) 640-5215 • www.ndsoygrowers.com

Jason Mewes, President • Colgate, ND At-Large • jkm89@hotmail.com Craig Olson, Vice President • Colfax, ND District 1 • craig.m.olson@rrt.net

Luke Kuster, Secretary • Grand Forks, ND **District 6** • pepe81182@hotmail.com

Ryan Richard, Treasurer • Horace, ND District 3 • richee2@hotmail.com

Kasey Lien • Milnor, ND
District 2 • klien04@hotmail.com

Eric Broten • Dazey, ND

District 4 • eric.broten@yahoo.com

Brent Kohls • Mayville, ND **District 5 •** bkohls@polarcomm.com

David Hartz • Cavalier, ND

District 7 • hartz@polarcomm.com **Dennis Renner •** Mandan, ND

District 8 • dennisrenner49@gmail.com

Bob Runck, Jr. • Casselton, ND

At-Large • kcnur@aol.com

Matt Swenson • Kindred, ND At-Large • swenson_58051@msn.com

Ed Erickson, Jr. • Milnor, ND

ASA Representative • edson@drtel.net

Joe Ericson • Wimbledon, ND

Young Leader • joeericson@hotmail.com

Aaron Brakke • Oxbow, ND

Industry Representative • aaron.brakke@chsinc.com

NORTH DAKOTA SOYBEAN COUNCIL

Diana Beitelspacher, Chief Executive Officer dbeitelspacher@ndsoybean.org

Suzanne Wolf, Communications Director

swolf@ndsoybean.org 1555 43rd St. South, Suite 103 • Fargo, ND 58103 (888) 469-6409 • (701) 239-7194 • www.ndsoybean.org

Scott Gauslow, Chairman • Colfax, ND **District 1** • sgauslow@yahoo.com

Tyler Speich, Vice Chairman • Milnor, ND **District 2** • tyler.speich@plantpioneer.com

Harvey Pyle, Secretary • Casselton, ND

District 4 • hap@cableone.net

Dusty Lodoen, Treasurer • Westhope, ND

District 11 • dustylodoen@gmail.com

Lucas Rode • Adrian, ND

District 3 • lucasrode@yahoo.com

Rick Albrecht • Wimbledon, ND

District 5 • no1hrs@daktel.com

David Gasal • Jamestown, ND

District 6 • dgfarm@hotmail.com

Troy Uglem • Northwood, ND
District 7 • tbuglem@outlook.com

Perry Ostmo • Sharon, ND District 8 • ppost@invisimax.com

Charles Linderman • Carrington, ND

District 9 • chlind@daktel.com

 $\textbf{Art Wosick} \bullet \textbf{Minto}, \textbf{ND}$

District 10 • artwosick@hotmail.com

Mike Appert • Hazelton, ND

District 12 • mappert@bektel.com

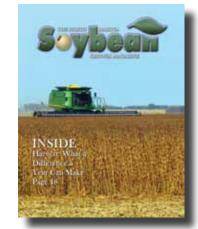
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On the Cover: Soybean harvest is the payoff for the year. Have a safe, successful fall.



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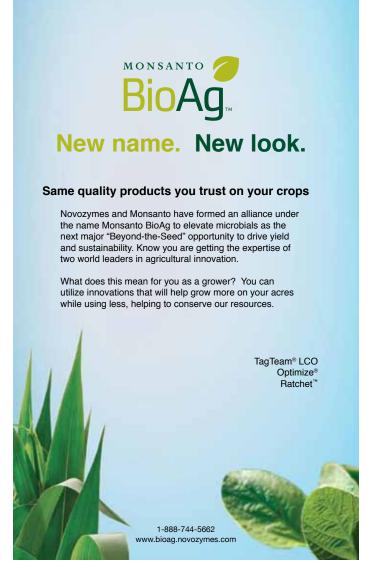
APPLICANT INFORMATION (Please Print)

| INAIVIL. |
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| SPOUSE: |
| DATE OF BIRTH: |
| FARM/COMPANY NAME: |
| ADDRESS: |
| CITY, STATE, ZIP: |
| COUNTY: |
| PHONE: |
| CELL: |
| EMAIL ADDRESS: |
| OCCUPATION: (Please check all that apply) |
| Farmer Retired Agribusiness Finance Elevator Other |
| DO YOU CURRENT GROW SOYBEANS? Yes No |
| Soybean Acres: Total Acres Farmed: |
| DO YOU RAISE: Cattle Hogs Poultry Dairy |
| HOW DID YOU HEAR ABOUT NDSGA? (Pease circle one) |
| Recruited in person; Recruited by phone; Magazine, Internet; Mailing; |
| Radio; Event; Other. |
| |

| ■ 3 YEAR \$200 ■ 1 YEAR \$75 |
|--|
| ■ New Membership ■ Renew Membership ID#: |
| Check enclosed (Please make checks payable to NDSGA) |
| Credit card: VISA / MasterCard / DISC / AM EX |
| Card #: |
| Name on card (Print): |
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Join Today and Start Taking Advantage of Member Benefits

As a member-driven organization, your support is vital to us. As a member of the North Dakota Soybean Growers Association, you are able to take advantage of many member benefits. Members receive special pricing on many General Motors, Chrysler, Jeep and Dodge vehicles. You now have access to Ford Motor Company's X-plan Pricing on many new Ford Vehicles.

Members can purchase Cabela's gift cards at a 10% discount and attend the Commodity Classic at a discounted rate. With your membership, your children and grandchildren become eligible to apply for the American Soybean Association Secure Optimal Yield (SOY) Scholarship Program. Please visit www.soygrowers.com for more details on these Member Benefit programs.

Complete and return the form on this page or just call 701-640-5215 to become a member today!

THE SHRINKING INFLUENCE OF AG

The days are getting shorter and the nights are getting longer. The air is getting cooler and the hours are getting longer. It must be harvest time.

The sweet smell of dust lingers in the air. The brilliant red and orange sunsets give way to the glimmer of halogen lights across the countryside. Each harvest day, this idyllic scene lays out before us as we reap the rewards of our work. We truly know that there is no better place to be than at home on the farm. Unfortunately, there are fewer of us to enjoy this scene than ever before.

As farmers age and retire, their land always seems to find a new tenant, but their farms often do not. Existing farms get larger and more efficient and the Ag community shrinks. In the short term, the effects of the shrinking community are not apparent, but over time, the impacts are immense. Each new generation is further disconnected to agriculture than the one that came before. After a couple of generations, their ability to relate to farming is greatly diminished. Even worse, their ability to care about farmers is nearly gone.

We are starting to feel the consequences of this shift in North Dakota. Agriculture has become lost in the long shadows cast by oil and the big cities. Far too many people overlook and underestimate the importance of agriculture to this state. The effects of this short-sightedness are great. Our Ag community finds itself in constant



Jason Mewes, President North Dakota Soybean Growers Association

battles with people who don't understand that agriculture sustains our small towns. They don't understand that if you take thousands of acres of productive farmland to provide flood protection and growth for Fargo, you just might kill the small town those farmers call home. It is this same mentality that thinks taking \$3 million of farmland per week for conservation won't hurt our communities either.

As farmers, we truly understand and value the role that conservation needs to play in our operations. We know that we must conserve our water and our soil, as they are the life-blood of our profession. We know that our sons and daughters will need this land long after we are gone. We also know that wetlands and grasslands are vital for the state's wildlife and these resources must be conserved for them to thrive. But what about our small towns? What do they need to survive?

When I think of my small town, I think of the elevator, the local café, the grocery store, the construction company, the aerial applicator and the school. I think of the people that work at these places and why they chose to make this their home. For most of them, it is because they see the opportunities that our small-town Ag communities provide. Then I think about if agriculture went away, would these people stay? The answer for most is no.

It is important for all of us to understand that agriculture as we know it is under attack. Whether it is because of government regulations, conservation groups, ballot measures or apathetic consumers, we are in a battle to maintain our influence in society. I ask you to find the leader within you and stand up and speak out for agriculture. We have a job to do and we won't stop until the job is done. It's what we do, especially at harvest time.

Stay safe and have a bountiful harvest!



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Mayville Grower Putting Business Degree to Work

The long, cold, wet spring is finally behind Brent Kohls. He is caught up with crop spraying, and harvest still is a few weeks away, so on a warm summer day, the first-generation farmer is sitting in his farm office north of Clifford catching up on bookwork.

The desk part of Kohls' job is what he expected to be doing after he graduated from college. It's the farming part that he did not anticipate for his career.

"My dad was an elevator manager in Minnesota," Kohls said. "I kind of grew up around elevators." During high school, he helped his father, Orval, load trains, clean bins and keep books at the Wheaton (Minn.) Dumont Co-op.

After he graduated from high school in 1992, Kohls attended Mayville (N.D.) State University and earned a business degree. In 1996, he moved to Minneapolis to be a broker for American Ag Co.

Kohls married his wife Jennifer in 1997 and then, for the next 10 years, farmed with Jennifer's brother, Mark Newman, and her father, Rick Newman. Kohls also marketed corn and ethanol for the former Alchem plant in Grafton for about the first 10 years



Kohls has hosted several international trade teams on his Clifford, N.D. farm. This team from Asia sampled soybeans for quality.

he was farming.

When the ethanol plant closed several years ago, Kohls began farming full time. As an elevator manager's son, marketing and brokering grain were familiar to him. However, farming was not.

"I didn't grow up on a tractor," Kohls said. During the last 17 years since he began farming, he's learned that the capriciousness of Mother Nature's weather, iron chlorosis in soybeans and weed resistance are just some production challenges that farmers face

However, learning to operate equipment is the easier part of farming, he believes.

"The production isn't the challenge; it's the marketing. Marketing still takes bushels, but you've got to know how to protect yourself and that it is a business." The skills he learned as a grain broker are an asset, Kohls believes

"It gives you a better understanding of risk management." Although he exchanges an office chair for a seat behind the wheel of a tractor or truck during some of the farming season, Kohls still spends a fair amount of time behind a desk marketing his grain and managing his business.

He works with his brother-in-law and father-in-law, but each of them operates his farm businesses independently. Together, they grow about 4,400 acres of crops. This year, the acreage is divided about equally between soybeans and corn. Kohls Farm and Newman Farm also sell Pioneer seed and operate a trucking business.

Kohls believes that another important part of farming is to be involved in grower organizations such as the North Dakota Soybean Growers Association. Kohls represents District 5 on the NDSGA Board of Directors and serves on its industry relations committee, helping with events such as the N.D. Soybean Growers Golf Tournament.

He previously served as a member of the executive committee and traveled to Washington, D.C., to talk about issues such as the farm bill. He wanted to serve on the soybean board because he believes it is important for farmers to have their voices heard.

"I understand the importance of what farmers do. I do it because I believe their voice is heard, and they make a difference in some of the lobbying."

Although he didn't plan to have a career in farming, he enjoys it.

Kohls says, "I'm using my degree." It just is not the way in which he originally expected. He was flexible enough to shift gears and adapt when he was presented with an opportunity to



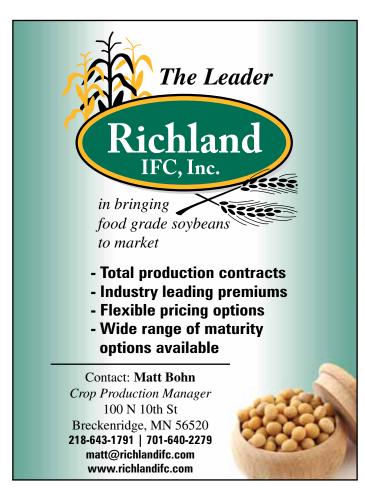
farm instead of being the kind of businessman who goes to an office every day.

One of the things he likes about farming is that things change from year to year.

"Every year is different. You don't always know."

For example, this year, the soybean harvest will likely be later than it typically is because field conditions were wet this spring and because temperatures remained cool after the seed was planted. It has been far from an ideal growing season, and Kohls acknowledges that, when harvest begins, it will be "push, push," but he is, nonetheless, looking forward to it.

"I like harvest the most. You can see what you've accomplished and see what you get in the end."





Dazey Farmer a Young Leader

Sovbeans are an integral part of the crop rotation for Dazey, N.D., farmer Eric Broten, and he believes membership in the organization that represents farmers who grow the commodity is invaluable, too.

Broten, 28, joined the North Dakota Soybean **Growers Association** (NDSGA) several years ago after being selected as a DuPont Young Leader. As a Young Leader, he sat on the association's board.

Although Broten had farmed for the past nine years and his dad had long been a member of the North Dakota Sovbean Growers Association, he said that he didn't really understand how the organization benefitted farmers until he attended the board meetings. "That showed me what the growers' organizations do for farming. You hear about a lot of crazy regulations, and they don't make any sense, and the people writing laws don't understand (the issues)."

On the other hand, organizations such as the NDSGA, which are made up of farmers, understand the issues and have an opportunity to be the voice of reason when it comes to developing rules and regulations. "It became apparent that's an important job," Broten



Eric Broten

said.

Now, Broten encourages farmers to get involved with their grower organizations. "If there

are rules and regulations controlling producers, it's awfully important for them to be at the front of the line."

Whether the issues are pollution, fertility management, load limits or personnel issues, the NDSGA does a good job of being on top of, and spreading the word about, issues, Broten believes.

Because the association is made up of soybean growers, it can voice its opinion on policy issues, Broten said.

Farmers are a small percentage of the North Dakota population, so it is

pretty easy for the general public to tell farmers whether something is positive or negative for agriculture, even though that opinion really might not be the case, Broten noted. On the other hand, the NDSGA Association can speak about issues from a farmers' perspective, he believes.

"We're a membership organization, so we can stand up and say 'This is good for agriculture, or this is not good for agriculture.'... Our job is to expose the truth."

Find Membership Tools at Big Iron

Stop by and see members of the North Dakota Sovbean **Growers Association** (NDSGA) board of directors at Big Iron. NDSGA members go home with a multifunction screwdriver. Plus, if you extend, renew or sign up for a new NDSGA membership, you'll be entered in a drawing for a \$500 cash prize sponsored by Asgrow.

A popular member benefit, the \$100 Seed Voucher Program is another benefit that you receive when you become a three-year member. New members

or current members who renew or extend their membership are also eligible for this voucher program that is sponsored by a number of leading seed companies. The vouchers are valid from August 1, 2014 to June 30, 2015 on a pallet or

tote of soybean seed. Redeem the voucher with your local dealer.

Stop by Booth C8 in the Expo Center at Big Iron to learn more about this program and other benefits of membership in the Association.





DEAR VALUED SOYBEAN PRODUCERS:

Over the last six months, we have witnessed significant and unprecedented rail service disruptions that are preventing us from moving our soybeans to market. Many grain shippers saw freight rates skyrocket and rail cars arriving weeks late. This issue is definitely a concern and a high priority for us as we gear up for the fall harvest.

The situation we are facing can be compared to connecting a garden hose to a fire hydrant because of the amount of goods needing to be shipped through the system. Increased demand for rail from ag products, coal, oil and intermodal shipping has driven up costs for rail cars and led to availability and reliability challenges. And – the impact on you is significant. The 40 to 50 cent per bushel losses are the difference between a profit and a loss.

At least 70 percent of our soybeans are shipped to the Pacific Northwest and from there to our international customers – primarily in Southeast Asia. Transportation is vital to maintaining overseas markets. We have a reputation for being a highly sought after supplier of soybeans because we have a history of delivering a high quality, consistent product in a timely manner (faster than Brazil or Argentina and with less transportation costs). Our reputation is on the line and we want to make sure it is not compromised because of the current rail situation.

In July, we met with rail officials to obtain their outlook on the upcoming harvest. BNSF Railway, the predominant railroad in our region, is investing a record \$5 billion in rail improvements to handle growth. The rail giant is also purchasing hundreds of new locomotives and hiring and training thousands of new employees. They are positioning to build a diverse railway system that will benefit all BNSF customers and plan to remain heavily focused on the northern plains for years to come. BNSF expects to reduce the past-due list by mid-September, yet has acknowledged that if the new harvest is as strong as it appears to be, the issue will not be completely resolved.

To this end, we are teaming-up with the North Dakota Soybean Growers Association and the Soy Transportation Coalition to identify what we can do to facilitate and expedite solutions to the serious rail delays in time for the upcoming harvest and marketing season. As of this writing, we are in the process of formulating our plan of action and will keep you informed as the process unfolds.

A solution will likely result from a collaborative effort with the railroads, the elevators, the farming community and key influencers and is likely to occur through an evolutionary versus a revolutionary process. Be assured that your partners at the North Dakota Soybean Council, the North Dakota Soybean Growers Association and the Soy Transportation Coalition are looking out for you and are focused on bringing alternative solutions to the table.

I wish you a very successful harvest!



Diana Beitelspacher Chief Executive Officer North Dakota Soybean Council



2nd Annual "See For Yourself" Program

North Dakota soybean farmers traveled to the Pactific Northwest to learn first-hand how their checkoff dollars are working and where their soybeans go

A group of North Dakota soybean farmers wanting to know more about their customers beyond the elevator, and the soy checkoff's role in marketing U.S. soy to those customers, participated in the North Dakota Soybean Council's (NDSC) "See for Yourself" program to the Seattle, Wash. area July 15-18. Each year, approximately 70 percent of North Dakota's soybean crop is transported by rail to the Pacific Northwest (PNW), where it is shipped overseas to international customers.

Washington State is a crucial port for export of North Dakota soybeans to



Participants of NDSC's 2014 "See For Yourself" tour at AGP's Port of Grays Harbor export facility in Aberdeen, Wash.

China and Southeast Asia. The North Dakota farmer group toured the Port of Grays Harbor; Ag Processing, Inc. (AGP) export terminal;

The North Dakota group touring the Imperium Renewables biodiesel plant at the Port of Grays Harbor.

Imperium Renewables biodiesel plant; Icicle Seafoods, Inc. and BNSF's Seattle Intermodal Facility.

At the Port of Grays Harbor in Aberdeen, Wash., the group learned how the facility was once the leading export port for U.S.-grown timber, but now the harbor leads the U.S. in exports of American grown soybean meal and is the number one seafood landing point in Washington State. While forest products remain an important piece of the Grays Harbor cargo mix, the Port has substantially diversified

the products shipped through this Pacific Northwest gateway to include automobiles, biodiesel and other liquid and dry bulk products.

Located at the Port of Grays Harbor is AGP's export terminal. AGP is a farmer-owned cooperative focused on the procurement, processing, marketing and transportation of grains and grain products. Over 1.4 million metric tons of soybeans travel through the port on a yearly basis. AGP can ship over 41,000 tons of soybean meal on one Panamax ship. That is equivalent to 1.5 million bushels.

"North Dakota is an important customer to export facilities like AGP," says Rick Albrecht, NDSC director from Wimbledon, N.D. "Since North Dakota is expected to produce 180 million bushels of soybeans this year, about 126 million bushels of soybeans will be transported to the PNW by rail and will be loaded onto vessels headed to Asia. Thanks in part to our North Dakota soybeans, the Port of Grays Harbor area is thriving economically. Also, because we can ship through the PNW, it takes our soybeans only 18 days to arrive at China, compared to the 35 it would take to travel from the Gulf of Mexico. We



Icicle Seafoods provides the North Dakota group with a tour of its net pen fish farm.

are closer to and a faster supplier of soybeans to our customer."

Imperium Renewables was founded in 2004 to produce high quality

biofuel made from a variety of grain crops, including soybeans and canola. Imperium is currently the nation's largest running BQ-9000 certified biodiesel refinery. There are eight two-million gallon tanks on the property with capacity to store 18 million gallons of raw and finished product.

"The fact that Imperium Renewables can export product by rail, truck, or water is very significant," says Perry Ostmo, NDSC director from Sharon, N.D. "Their facility at Grays Harbor sits on 12 acres and their capacity to produce over 100 million gallons per year is impressive, making them the largest biodiesel producer in the country."

Icicle Seafood, Inc. is the only U.S. owned and operated net pen salmon *Continued on Next Page*



From left to right: NDSC Director Troy Uglem, NDSC Marketing Director Stephanie Sinner, NDSC Director Perry Ostmo, and NDSC Director Rick Albrecht.



farm. The company has been using ocean net pen farming to safely and sustainably grow Atlantic Salmon in Puget Sound for more than 30 years. The Sound is ideal for growing salmon. The operation has four pen sections with 20-30,000 fish per pen, and annually produce 20,000 tons of Atlantic salmon.

"It was very interesting to see first-hand the farming of salmon from fish egg to the fish going to market," says Troy Uglem, NDSC director from Northwood, N.D. "Icicle Seafood uses a fish food with soybeans as a main ingredient. The potential for soybean meal in aquaculture is great. Our protein-rich soybean meal, high in amino acids, is a sustainable replacement for the fishmeal traditionally used in aquaculture feed rations."

At the BNSF Intermodal Yard, BNSF representatives provided the North Dakota group with a tour, including how containers are loaded/unloaded from trucks, rail and vessels. The group also had the opportunity to discuss current transportation challenges in North Dakota with BNSF officials.

The delegation of North Dakota farmers included: Zach Tronson of Doyon;



The last day of the tour, the group had an opportunity to visit Seattle's famous Pike Place Market; one of the oldest continuously operated public farmers' markets in the United States.

Justin Sherlock of Dazey; Logan Erickson of Milnor; Mark Gainor of Milnor; Joe and Robin Morken of Casselton; Justin Halvorson of Sheldon; Ryan Sinner of Casselton; Matthew Poulson of Wheatland; Kris Poulson of Casselton; Rick and Kay Albrecht of Wimbledon; Troy Uglem of Northwood; Perry Ostmo of Sharon; NDSC Director of Marketing Stephanie Sinner; and NDSC Communications Director Suzanne Wolf. Shawna Olson of KFGO attended and reported daily radio updates from each location.

"Our annual 'See For Yourself' program is an excellent opportunity for North Dakota soybean producers to engage directly with the programs their checkoff dollars are funding," says NDSC Director of Marketing Stephanie Sinner. "For North Dakota, transporting our soybeans to export markets is a critical piece of our story. This program is an opportunity to see all the pieces in action including meeting the important folks who help get North Dakota soybeans to our customers around the world. Plus we have a great time getting to know our soybean farmers as we travel together and participate in the industry tours."

Interested in seeing these locations for yourself or learning more about your checkoff dollars? Join us next year for NDSC's Annual "See For Yourself" program. Watch for more information in future North Dakota Soybean Grower Magazine issues, or send us your email address to be added to our email list, and be the first to learn of these type of opportunities. Email your address to mfern@ ndsoybean.org.

Soybean Cyst Nematode Basics

Soybean cyst nematode (SCN) has become a significant yield threat to North Dakota soybeans in the last decade, according to Dr. Sam Markell, NDSU **Extension plant** pathologist. The pathogen (Heterodera glycines) was first found in Richland County in 2003, and has since been confirmed in a dozen counties and is suspected in many more. If SCN is detected soon after it is found in a field, it can be managed, but if it is left unchecked, it can cause yield losses for years.

Soybean cyst nematode is a parasitic worm that can infect soybeans, dry edible beans and several weeds common in North Dakota, Markell explains. SCN overwinters as eggs which are protected in a cyst. When the eggs hatch (and molt), juvenile worms (J2) enter the soybean roots and mate. Female worms will fill with hundreds of eggs, enlarge into a cyst and erupt through the root tissue. The female cyst is lemon shaped and will go from cream colored to dark brown; it is the only time that you can see SCN with your naked eye (Figure 1). SCN can complete up to three life cycles during a growing season while causing significant damage by parasitizing plants and interfering with nutrient and water uptake.



Figure 1. Cream-colored SCN cysts on a soybean root.



Figure 2. Yellow area in a field caused by SCN.

SCN is notoriously difficult to detect, says Markell. It can cause 15-30 percent yield losses before you see any above-ground symptoms. Complicating this situation, when you see SCN damage in a field, there is nothing specific about it; stunting and yellowing are the two most common symptoms (Figure 2). The timing of those symptoms is important. SCN needs time to damage plants, so yellow areas in fields that show up

in June are not likely to be SCN related. However, yellow areas in fields that appear towards the end of the season (August or later) could be SCN.

Markell says that there are two primary ways to detect SCN: 1) soil testing for SCN and 2) examining roots. Soil testing is a much more reliable method for detection, and the North Dakota Soybean Council is sponsoring SCN testing reimbursement again this year (See the article on

page 15). Examining roots is tricky, but it can be done. September is an ideal time to examine roots. The entire root mass should be dug up. (Do not pull soybeans because the cysts will fall off the plant.) Soil should be cleaned off gently (water helps) and examined carefully for white-cream colored small cysts. A hand lens helps a great deal.

SCN can be managed very well if it is detected early, explains Markell. More SCN-resistant varieties are being bred into the early maturity groups that fit in our region, and both sources of resistance (PI88788 and Peking) are effective. Rotating out soybeans for one year will help reduce the SCN population, but two years out is even better. Nematicide seed treatments are being marketed and may have a fit in a management strategy, particularly in fields with high egg levels. There are four nematicide trial locations in North Dakota this summer: two in Richland County, one in Cass County and one in Traill County. While no management strategy will eliminate SCN, implementing these strategies can keep the egg levels low, which is critical for growing a healthy soybean crop.



Soybean Cyst Nematode (SCN) Soil Sampling: Q and A.

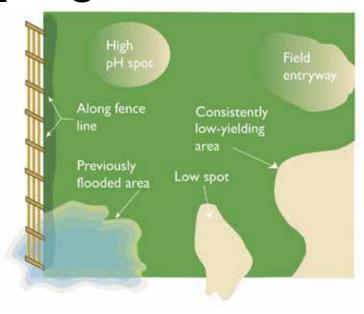
Q. WHEN DO I SAMPLE?

A. At the end of the season. Each female cyst may contain a couple hundred eggs, and in North Dakota, SCN will likely go through two-tothree life cycles a season. According to Dr. Sam Markell, NDSU Extension plant pathologist, if you do the math, the egg levels will be magnitudes higher at the end of the season. If you want to find SCN, sample just before or right after harvest.

Q. WHERE DO I SAMPLE IN MY FIELD?

A. Think like the nematode! SCN moves with soil, says Dr. Markell, so the most likely places to first find SCN are the same areas where soil (and cysts) are moving.

- Field entrance: It is easily the most important place to sample. Soil on equipment has been the most important way SCN has moved across the country.
- Shelter belts: The high winds in North Dakota blow plenty of soil, and cysts/eggs may blow with them. When



shelter belts break the wind, soil (along with SCN eggs and cysts) can be deposited alongside them. When soil accumulates along shelter belts, eggs are deposited.

- Low spots/flood-prone areas: SCN can move in water, and we have had plenty of flooding in recent years. Also, birds love water, and they can move SCN.
 Waterfowl digest SCN and deposit SCN eggs in wet areas.
- Yellow areas late in the season: It takes time for SCN to damage the plants, and many times, there are no visible above-ground symptoms. BUT! If you

- see spots in a field where soybeans start to yellow prematurely late in the season (especially August), you should consider that area suspicious for SCN.
- High pH areas. High pH (alkaline) is a very favorable environment for SCN. We often first see SCN in these areas because the SCN population can increase extremely fast in high-pH areas.

Q. HOW DO I SAMPLE?

A. Aim for the nematode.

Aim for the roots. SCN
is a parasite that lives on
roots. Use a soil probe,
and pierce the roots.

Dr. Markell uses a 1-inch soil probe, puts it 2 inches from the stem and aims under the plant. He says that 6-8 inches is usually deep enough to find the cyst.

- Take lots of samples.
 The more you sample, the more likely you are to find SCN. Take 10-20 soil cores; mix them up; and put them in a sample bag.
- Don't sample dead plants. SCN needs live soybeans to survive.
 The margins of yellow field areas are better targets than the middle of a yellow area where the plants are already dead.
- Send in the sample soon after collection.
 You are sampling a living creature; keep the sample out of the sun, and get it to the lab as soon as you can.

Q. WHAT DO THE RESULTS MEAN?

A. If you find SCN, manage it. If you didn't find SCN, sample again next year.

According to Dr.
Markell, lab results are
typically reported as
eggs/100 cc, or eggs in
about ½ cup of soil. Think



2014 SCN Soil Testing Program

The North Dakota Soybean Council (NDSC) is sponsoring a Soybean Cyst Nematode (SCN) soil-testing reimbursement program again in 2014. The program will be coordinated through the North Dakota State University Cooperative Extension Service.

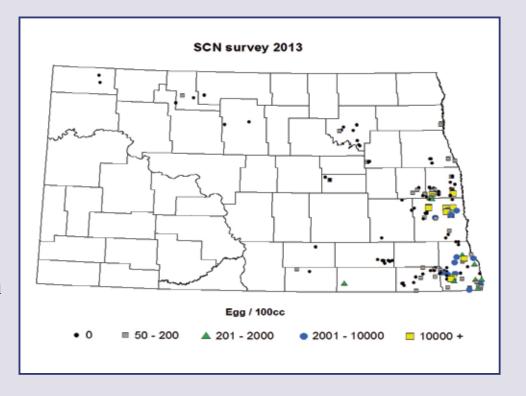
SCN EGG LEVELS AND DISTRIBUTION IN NORTH DAKOTA

At the end of the season, the NDSU plant pathology department will be sent a list of egg levels and geospatial points (no names, etc.) to construct a map of SCN egg levels and distribution in North Dakota. This map

helps all of us monitor the movement of SCN, a key for assessing risk and proactively managing this disease. In 2013, some very high egg levels were identified in Richland, Cass and Southern Traill Counties. Very few samples were taken outside the Southern Red River Valley, but SCN has been confirmed as far north as Pembina County and as far west as Emmons County. Dr. Sam Markell, NDSU Extension plant pathologist, encourages all growers who have planted soybeans for several years to consider sampling.

HOW IT WORKS

Two thousand SCN soil-sample bags will be available at NDSU **County Extension** offices in 2014. 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.



of this result as a "risk" factor, where the higher the number, the greater the risk. Very low levels (<100) could be false

positives, and resampling is recommended. Very high levels (>10,000 eggs/100 cc) will significantly challenge soybean production for at least one season (and maybe more).

Markell recommends beginning management

strategies (resistance and rotation) if any positive samples are found.



Checkoffs Offer Women Great Opportunities to Get Involved

Most folks involved in American agriculture know that women have always played an important role on the farm. Whether they run the house, keep the books or do both while overseeing practically every other aspect of the family's row-crop and cattle operation, they stand at the heart of American agriculture right beside the men.

When you look at who runs the checkoff programs, you won't see a representative number of the 288,264 female "principle operators" counted in the most recent U.S. Census of Agriculture. For some reason, the volunteer boards of farmers who are charged with investing millions of dollars in research and promotion to support U.S. commodity industries only have a few female directors.

Angela Dee, Alabama farmer and director on the United Soybean Board, is in her third year serving as one of 70 soybean farmers on the United Soybean Board (USB), the organization which oversees investments for the national soy checkoff. Last



Angela Dee, Alabama farmer and director on the United Soybean Board.

year, the USB allocated about \$100 million for programs designed to maximize American soybean farmers' profit opportunities, from consumer outreach, to research about new varieties that fight disease and pests, to customer programs in China that help poultry and livestock producers use more U.S. soy, and a lot more. There are three women on the board.

More female farmers across the country – whether they raise livestock, soybeans or any other crop – should step up and become leaders for the checkoff programs into which they pay.

Women with a passion for

agriculture make wonderful leaders. They also tend to connect with people really well, as in CommonGround, a program that USB started with the National Corn Growers Association to link female farmers with their city counterparts. CommonGround is one of the ways women who haven't previously served ag organizations can begin to get involved.

With the soy checkoff, farmers typically get involved with their state soy checkoff boards (called Qualified State Soybean Boards, or QSSBs for short), and then, if they're interested, they raise their hand to be considered for a spot on

the USB.

Speak up, tell your story, and keep telling it. People want to hear from you. U.S. agriculture needs all the passionate, smart farmers it can get, and women are a big share of that group.

Female soybean farmers who are interested in getting involved with the soy checkoff should contact North Dakota Soybean Council CEO Diana Beitelspacher at (701) 239-7194 or by email at dbeitelspacher@ndsoybean.org.

For more information about CommonGround, please visit www.Find-OurCommonGround. com.



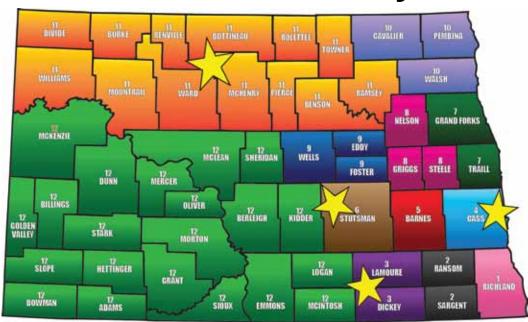
NDSC County and District Elections to Take Place in Early 2015

In early 2015, the North Dakota Soybean Council (NDSC) will seek four soybean farmers to serve on its board of Directors and to represent fellow soybean farmers and the industry.

The process is conducted with a mail ballot. Soybean farmers who reside in counties that are up for election will receive instructions regarding NDSC's election process via mail after January 1.

Keep an eye on your mailbox for ballots and more information if elections are taking place in your county and district.

If you have questions regarding the election



process, contact the NDSC office at 1-888-469-6409 or by email at dbeitelspacher@ ndsoybean.org.

Elections will be held

for:

DISTRICT 3: LaMoure and Dickey Counties DISTRICT 4: Cass County

DISTRICT 6:

Stutsman County
DISTRICT 11: NW
counties (see map).

Districts with a star will have elections in 2015.



Come See Us At Big Iron!

Come visit the North Dakota Soybean Council at the Big Iron Farm Show at the Red River Valley Fairgrounds in West Fargo, N.D. We will be there September 9, 10 and 11!

Stop by our exhibit in the Commercial Building (booth C7), and learn more about how the soybean checkoff is working hard to invest in programs that improve farmers' bottom line. For more information about Big Iron, visit its website at bigironfarmshow.com

Harvest: What a Difference a Year Can Make

At the end of August 2013, November soybean futures closed at over \$13.57 per bushel.
Looking back, it was an easy decision to sell soybeans right off the combine. Given the steep price decline this year, it looks like storing soybeans may be a more common marketing plan.

How many beans end up in the bin will be determined by the final size of this year's crop which will also dictate the price. Dr. Frayne Olson, North Dakota State **University Extension** crops marketing economist, says the expectation is for a monster crop. "Given that, and at least in North Dakota, we have quite a bit of carryover corn left, I'm concerned about the availability of storage space," says Olson. "I think we're going to see basis levels during harvest widen out again significantly. I think there's going to be a strong incentive for farmers to find some storage."

Olson thinks that bin space will be at a premium and that elevators will have to store a lot of grain on the ground again this fall. "Grain storage is going to



Frayne Olson

be at a premium, and we better be prepared for some of that," says Olson. "I think there's going to be a lot of interest in temporary storage, such as temporary bins or bags, but I emphasize temporary; that better be some of the first crop you try to get moved out

again."

Craig Haugaard, grain manager at North Central Farmers Elevator in Ipswich, S.D., says cash prices this fall will be largely dependent on the basis, and he's seen some pretty expensive numbers being quoted for harvesttime freight. "We continue to see the railroads struggle to perform, and that's the other part of the equation that I think may weigh on prices," says Haugaard. "If we get into harvest and freight is still extremely expensive to buy, you may see that more fully reflected in the bids than vou are at the current time."

As of August 8, BNSF Railway's agricultural group vice president John Miller reported 1,774 past due railcars in North Dakota, a 77 percent reduction from the 7,719 past dues as of April 19. Canadian Pacific Railway CEO Hunter Harrison estimated CP was 1,000 railcars away from being caught up in North Dakota.

Paul Coppin, Reynolds United Co-op general manager, thinks that rail service actually went backward this summer. and he has some real concerns going into harvest about how to get old-crop grain shipped. "A lot of that grain is still not priced, which may be good for the railroads, but we know it's going to have to move sometime," according to Coppin. "There's a lot of concern



Paul Coppin

out in the country right now about being able to ship both the 2013 and the 2014 crops, which is probably going to try to happen to a certain extent at the same time."

Coppin says that there is so much uncertainty right now. Once the grain does get priced and needs to move, elevator managers don't know how they're going to move it and how quickly they're going to move it. That situation equates to a wider basis. "It certainly does. The freight values, just for the right to get a railcar, is 60 cents to \$1 a bushel premium. That doesn't even take into



Carrol Duerr

account what the actual freight would be," says Coppin. "It's piling onto an already poor grain market, and nobody is real happy about it."

Carrol Duerr, the Colfax **Farmers Elevator** manager, is very

concerned about the price railcars are going for, and it's difficult to try and anticipate how much country movement is going to be. Duerr refers to the situation as a "real chess match" for country elevators.

Given the \$2,000 to \$4,000 premium elevators have paid for railcars for this fall, Duerr says basis levels will not improve anytime soon.

The basis, or the difference between futures and cash prices, did improve some this summer, particularly in eastern North Dakota, but Olson thinks that, for the next couple years, we're going to be looking at basis levels similar to what we see today. "We're just going to have to become accustomed to a little bit wider basis until we can adapt to the new logistics system we're under," says Olson.

Olson says that selling soybeans right off the combine has worked very well for farmers the last several years, but this year might be a bit different. How long they store their beans will be partly determined by when the world export demand shifts back to the U.S. from South America as well as what kind of logistical issues we might have getting beans to the Pacific Northwest. An increase in exports may signal the bottom of the market, but Olson says

we're not going back to the price levels we've seen the last couple years. "It's going to take some kind of major shock to the system, such as a political action or weather event, before we start to see any significant improvement. The most likely shock would be some type of major problem in South America," Olson says.

Some farmers who either could not or did not want to sell old-crop grain have requested an extension of operating loans to cover some of that inventory, creating some difficult negotiations between farmers and lenders for two reasons. According to Olson, "The declining value of that inventory on the balance sheet has decreased the amount of working capital significantly. Plus, the value of what farmers will produce in 2014 has dropped, reducing their profitability and their ability to repay loans. These swings in the market can have major financial implications as we move forward."

Like Olson, Coppin

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does not expect rail service to get any better this fall due, in part, to the huge crop that will have to move from the eastern corn belt. "There's no real answer, and it's just going to take time, and sometimes, we don't have that much time," according to Coppin.

Transportation is Our Competitive Marketing Edge

The foundation of our global competitive edge for soybeans is rooted in focusing on production and logistic basics. Production success relies heavily on critical research basics such as facility infrastructure, people, tools and time. Our logistical edge is dependent on an effective and efficient transportation system.

The primary customer for North Dakota soybeans resides in Asia and we are America's soybean west coast. Keys to satisfying our customers' needs include quality soybeans as well as effective transportation ties between our farms and the Pacific Northwest's export harbors that are required for on-time deliveries to our prime customers. Our soybeans have outstanding quality, but we are currently feeling the squeeze of undersized and decaying transportation systems here and en route to the export ports.

Well over 70 percent of our soybeans cross America's great Rocky Mountain divide as they rail their way to port facilities. Many folks here at home do not fully understand the relatively short period to successfully market America's soybeans before South America markets its crop. The world's customers have two major soybean crops each year: ours in the northern hemisphere's Fall and South America's in our late Spring. The cyclic pace makes an effective, efficient delivery system absolutely critical.

Today, the rail system between our fields and our western export facilities is taxed to near its maximum capacity. Some would lay the blame at the feet of our expanding oil industry; that assessment would be unfair. One thing we should understand is that no one person, or group, has accurately predicted the far-reaching impacts of the rapid development of North Dakota's oil and gas. In a nutshell, for us in agriculture, our current rail issues are not agriculture vs. oil and gas. The issue is a rapid, total load expansion for agriculture, oil and gas. In the last 30 years, North Dakota's agriculture production has increased substantially; wheat is up 11% while corn has risen 1,090% with soybeans up 395%. Today, we produce about 90 billion pounds of agricultural products.

BNSF Railway and others are working hard and fast to expand capacity across the northern tier states. They've made



Scott Rising, NDSGA Legislative Director

commitments of significant resources and developed a multi-year plan aimed at meeting our and our customers' needs, as well as those of other industries.

We also need to take those same actions for our state's road systems. The Upper Great Plains **Transportation Institute** (UGPTI) has provided the legislature with its analysis of rural road and bridge needs for the coming biennium and beyond. The UGPTI's work is more comprehensive and detailed than ever. The needs are pegged at \$993 million for the biennium, continuing work to put the rural road and bridge infrastructure on a path to recovery. Our state highway system will also need significant funding and attention.

You and I, in fact all of us, have a role to play as we move toward the needed success. Collectively, we have choices to make. We can choose to rebuild our rural roads and bridges over the next few biennium or to vacate them; and jeopardize our competitive edge in global markets, along with major portions of our rural economic vitality and 25 percent, or more, of our urban economy. Hopefully, we are determined to avoid a similar catastrophe that we had in the 1980s: that situation still overshadows many of our institutions and processes.

Additionally, the agriculture sector must invest time and talent to understand the impact of individual actions, over time, that will enable a legacy for maximizing the care and maintenance of our rural road and bridge assets.

Enter the ESAL!
Equivalent Single-Axle
Loading (ESAL) factors
are critical to the wear
and tear of roads and
bridges. We are
committed to bring you
more information on the
subject of ESALs, but for
now, it suffices to say that
less is better as we seek to
maximize the safety,
effectiveness and
efficiency of our
transportation system.

Record Soybean Acreage, New Growers in North Dakota

The U.S. Soybean planted area for 2014 is estimated at a record high of 84.8 million acres, up 11 percent from last year. The area for harvest, at 84.1 million acres, is up 11 percent from 2013 and will be a record high by more than 7.4 million acres if it is realized. Record-high planted acreage is estimated in Michigan, Minnesota, Nebraska, New York, North Dakota, Ohio, Pennsylvania, South Dakota and Wisconsin.

North Dakota's planted acreage of all principal crops is up 2.46 million, or 12 percent, from last year. North Dakota farmers planted 800,000 fewer corn acres than last year, a 21 percent decline, while increasing soybean-planted area by 29 percent to a record 6 million acres. That's an increase of 1.35 million acres in one year.

Ivan Williams, a Bayer CropScience sales representative, estimates about a 30 percent increase in soybean acres for his northwest North Dakota territory. The late planting season was one factor behind the increase, and soybeans branched into areas where they probably weren't seen in the past. Williams thinks that soybeans are an alternative crop that will work in the northwest quarter of North Dakota.

"The genetics are good right now; improved a lot, but it's hard to say how much farther west soybeans can expand," says Williams. "When you get 25, maybe 30, miles west of Minot, those guys are really good at raising cereals and canola, and I think they'll stay with those acres."

Average yields in northwest North Dakota are approximately 25 bushels per acre. Of the 30 percent increase in soybean acres in his territory, Williams estimates that 20 percent of the increase was planted by first-time soybean growers.

In central North Dakota, soybean acres also increased this year. Bob Amstrup, a crop consultant who operates Top Op out of Bismarck, says the increase was at a slower rate in his area. "We've had a rapid increase over the last 3 years. I'd say the increase this year is somewhere around 10 percent."

Amstrup says that environmental conditions are a limiting factor for soybean acres in central and western North Dakota. "Once we get west of the Missouri River, it's hard to buy a rain during that critical month of August. That limits yields, so therefore, it's going to put a cap on these soybean acres." Amstrup says that his area has been fortunate the last couple of years but thinks that's apt to change, and all the growers know they can't always have an ideal August.

Amstrup thinks that all the years of zero-till in western North Dakota are starting to pay dividends. "We have built up our organic matter which is beginning to reward growers with better stands, better water-holding capacity, and the overall soil health has been greatly increased over the last 10 years."





Weeds: A Growing Problem

Combatting annual weeds is a numbers game. Specifically, the seed production numbers. This numbers game holds true for all annual weeds, but it becomes even more important in the case of herbicide-resistant weeds. July through September are the key months for most weedseed production, which happens to occur just prior to the harvest of most cash crops. Unlike most of our crops, the weed seeds typically do not mature uniformly on a plant or in a population, allowing the weed species to develop viable seed for a long period of time if not controlled. Variable maturity also opens up multiple avenues for seed dispersal because seed can fall to the ground prior to harvest, go through the harvester (ending up in the grain or passing through the combine), or spread by wind or water after harvest.

Weed-seed production and dissemination can never be fully stopped, as evidenced by the decades since the green revolution. Nature finds ways to avoid our best efforts to control pests, through long-distance dispersal, seed dormancy,



Mike Ostlie, agronomist at Carrington Research Extension Center.

or us. The best way to combat this issue for next year is monitor your surroundings after the last weed-control pass. Did some weeds escape the control measure; if so, why? Do the field borders have weeds that were not controlled? Is there a bare and/or saline patch that is breeding kochia seed? If these plants are left to mature, it is more likely that the problem will be worse, not better, next year. A single kochia plant, growing on a field margin or saline zone, can produce 50,000 seeds. It does not take many of these plants to perpetuate the weed problem for next year. If the weed problem

is one of the amaranth species (redroot pigweed, waterhemp or palmer amaranth), the seed production per plant is many-fold higher yet.

The key to a long-term weed management program is managing those seed numbers. The weed management tools that we have available for most crops are quite potent when used correctly. Start by identifying areas during the fall that could be a problem next year. If possible, reduce the seed production this year. The sooner the weeds are removed, the fewer viable seeds will be produced. That process may involve

continued mowing along field margins, spot spraying or planting fall cover crops. Properly identify the weed species and/or any resistant populations. Choose an appropriate fall- or spring-applied residual herbicide or cover crop to combat the expected weed pressure. If something isn't working for the entire field (such as planting soybeans into saline ground), it may be necessary to manage troublesome areas separately (maybe with a cover crop or different cash crop/forage). Use post-emergent herbicide options to clean up weeds that were missed.

Here is why it is hard to win the numbers game. Most people would be happy to achieve 99 percent control of the weeds in a field. With the kochia plant mentioned above, that would still potentially leave 500 seeds in the soil's seed bank. Next year, maybe 400 emerge with a reduced yield potential of 20,000 seeds per plant. That 99 percent control would still leave 80,000 seeds. It is the exponential increase year-over-year that gives nature the upper hand in the numbers game.



NDSC Participates in Regional Soybean Research Gathering

Representatives from 12 states met in Iowa to discuss soybean research progress and results. Directors for the North Central Soybean Research Program (NCSRP) met July 22-23 to review research being conducted to improve the competitiveness of soybean farmers. The NCSRP board is comprised of farmer leaders from 12 Midwestern states,

including Tyler Speich of Milnor, N.D., Vice Chairman of the North Dakota Soybean Council (NDSC) and Chairman of NDSC's Research Committee, and NDSC Director of Research **Programs Kendall** Nichols, who participated in a behind-the-scenes look at Iowa State University (ISU) research, including work directly funded by the NCSRP. In addition to visiting

the Seed Science Center, tour participants traveled to the university's research fields west of Ames to meet with the scientists completing the projects and to discuss additional soybean research opportunities. The board also met at the Iowa Soybean Association in Ankeny to discuss plans for 2015 research opportunities and to receive updates about the research that is currently

in progress.

Twelve state soybean boards actively participate and fund the NCSRP: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin. The NCSRP board meets three times annually to review and fund regional sovbean research in collaboration with the United Soybean Board (USB) and the memberstate soybean boards. For more information about NCSRP-funded soybean research, visit the Soybean **Research Information** Initiative at www.soybeanresearchinfo.com.



North Dakota Soybean Council Vice Chairman Tyler Speich of Milnor, N.D. (far left), learns more about an aphid-resistant soybean plant project in Ames, Iowa, on July 23 with fellow directors of the NCSRP.

MARK YOUR CALENDARS!

2015 Northern Soybean Expo

February 17, 2015, Holiday Inn, Fargo, N.D.



Make Harvesting Safer

Harvesting is often hectic, making it a prime time for farm accidents.

"Safe harvests begin with the prevention of accidents," Dr. Ken Hellevang, North Dakota State University Extension Service agricultural engineer, says. "Watching the weather and making sure equipment is used correctly and safely will help bring in a crop in good condition."

THE HUMAN FACTOR

Completing any task safely depends on knowledge, alertness and hazard awareness, according to Hellevang. Fatigue, drowsiness and illness can lead to mishaps in the field, so the key is to recognize when you've had enough and to turn the operation over to someone else.

Here are some other safety tips:

- Do not rely on stimulants to keep you going or depressants to calm your nerves.
- Take periodic breaks to relieve the monotony of operating machinery.
- Teach workers the proper techniques and safety precautions.
 Enforce safety rules.
- Allow youth to only do age-appropriate work.
- · Follow the no-seat,



no-rider rule. Do not allow people to get on or off any moving machinery.

- Become familiar with equipment used only during harvest so that you are able to anticipate and avoid potentially hazardous situations.
- Do not allow children around machinery.

GRAIN-HANDLING HAZARDS

Grain dust may be a health hazard. Anyone working in a grain bin, especially when cleaning it, should wear a mask or respirator that can remove mold and dust particles. Wear an N95-rated mask as a minimum protection.

Spoiled grain produces mold spores which, when inhaled, can irritate sensitive respiratory tissue or cause allergic reactions. Severe reactions may require hospitalization.

Here are some other safety precautions:

- Check inside the bin, wagon or cart before turning on the auger's power.
- Place grain-entrapment safety decals by the ladders on wagons, carts and bins so that others will be aware of the dangers.
- Stay outside grain tanks, bins, wagons and trucks when the unloading equipment is running. If entering the bin or other grain

- container is necessary, shut off the unloader.
 Lock any unloading equipment before entering a bin to prevent someone from unintentionally starting the equipment while you are in the bin.
- Lock the access doors to grain bins, and limit access to the top of grain wagons. Instruct everyone who operates grain wagons or grainhandling equipment about the potential suffocation hazards.
- Make a commitment to always have an extra person present when you must be in an area that has a potential grain-suffocation hazard.
- Make sure that shields cover all the augers' grain intakes.
- Transport augers in a lowered position with the safety-locking devices in place. Be alert for overhead power lines.

BEFORE THE HARVEST

Safety should begin prior to harvest. Here are some steps to take before getting in the field:

 Read the equipment's operators manual, particularly paying attention to the general safety rules and



- specific safety recommendation for each machine.
- Provide good ventilation in shops or storage buildings because the exhaust fumes from a gasoline or diesel engine are very poisonous.
- Always clean the combine before starting. Trash around the exhaust system can cause fires. Oil, grease or mud on ladders or on the platform can cause serious falls.
- Make sure that all shields and covers are in place and fastened securely.
- Make sure that every piece of powered equipment has a fire extinguisher and first-aid kit.
- Before starting the combine, make sure everyone is clear of the machine.

MOVING THE COMBINE

Keep these rules in mind when moving your combine:

- Stay focused on your driving.
- Make sure you are familiar with local traffic laws. Check the safety flashers and "slow-moving vehicle" emblems to be sure they are clean and visible.
- Brake slowly because slowing too rapidly

could cause you to lose some steering control.

OPERATING THE COMBINE

These recommendations will help keep you safe when operating a combine:

- Operate hydraulic controls only when you are in the operator's seat.
- Never attempt to clear plugged equipment with your hands or feet while the equipment is running. Modern farming equipment is powerful, and a person can be dragged into the machine in a second, resulting in the loss of a limb or even death.

- Always shut down the combine and turn off the ignition before removing plugged or lodged material.
- Make sure harvesting equipment is shut off before doing any maintenance or making any adjustments. Never leave the operator's platform with the engine running.
- Make sure the shields are fastened securely.
- Block hydraulically raised equipment securely before working around or under it.
- Be extremely careful when checking for leaks because highpressure fluid leaks in

- the hydraulic or dieselfuel system can puncture the skin. Use cardboard or other material to observe a leak. If injuries occur, seek medical aid immediately.
- To make sure drive units do not injure anyone when the machine is restarted, take the following steps when stopping the combine: disengage the header and separator drives, lower the header, apply the parking brake, and remove the ignition key to prevent someone from tampering with the combine or starting it accidentally.

Nematologist Joins NDSU

Dr. Guiping Yan joined the Department of Plant Pathology at NDSU on July 1, 2014. Dr. Yan fills the nematologist position created by the last North Dakota legislative session to help manage plant parasitic nematodes in North Dakota.

Before joining NDSU, Dr. Yan was working as a post-doctoral researcher at Oregon State University and



earned a Ph.D. from Washington State University. She has worked with several economically important nematodes and has expertise in nematode detection and management. Dr. Yan now turns her focus to economically important nematodes in North Dakota, including Soybean Cyst Nematode.

Dr. Yan can be reached at guiping. yan@ndsu.edu or 701-231-8362.



U.S. Soy Trade Draws Asian Food Companies to Northern Crops Institute's Training

The North Dakota Soybean Council's (NDSC) trade outreach to Asia reached two key countries in June when the American Soybean Association's World Initiative for Sov in Human Health (WISHH) brought food industry leaders from Pakistan and Bangladesh to the Northern Crops Institute (NCI). The U.S. Department of Agriculture (USDA) **Emerging Markets** Program funded WISHH's trade outreach.

"Like China, Pakistan and Bangladesh have large populations and a growing appetite for U.S. soy protein," said NDSC **Board Member and** WISHH Program Committee Member Art Wosick, Minto, N.D. "This trade delegation includes a large Pakistani bakery that is already a regular buyer of CHS soy flour. USDA's support of our bringing this group to North Dakota creates more common ground for trade to grow."

"The NCI soy-baking course continues to grow in popularity, and we are delighted that customers using soy flour in their food products are requesting that we host the course again," NCI **Director Mark Weber** says. "WISHH, along with the U.S. Soybean Export Council (USSEC) and the regional state soybean councils, are our valuable partners in making these courses possible. The high nutritional aspects of soy flour are helping improve human dietary needs in developing countries of the world, and its use in baking products continues to increase."

With 187 million people, Pakistan is the sixth most-populous country in the world.
Pakistan's government
has already committed to
reducing the "protein
gap" in diets, so U.S. soy
has an enormous
opportunity as both food
and feed in Pakistan.

Bangladesh is home to 150 million people, making it the eighth most-populous country in the world. The USDA reports that Bangladesh is home to a \$16 billion food-retailing sector and that retailing is growing about 7 percent per year due to both economic growth and urbanization.



NDSC hosted a luncheon at Santa Lucia Restaurant in Fargo on June 19 for the visiting food industry leaders from Pakistan and Bangladesh. NDSC's representative on the WISHH board, Art Wosick (second from left), welcomed the group to North Dakota on behalf of NDSC, along with NDSC Director of Marketing Stephanie Sinner (far left) and NDSC Manager of Business and Administrative Services Molly Fern (far right).



Soybean Night at the Fargo RedHawks Game

The North Dakota Soybean Council (NDSC) sponsored the June 24, 2014, RedHawks baseball game in Fargo with a "Soybean Theme Night" at the ballpark. For the first thousand fans at the game, NDSC gave bags of potato chips that were fried in soybean oil produced by high-oleic soybeans. This new oil offers improved functionality for the food industry and helps expand the market for soybean farmers, increasing profitability. Along with potato chip bags, free chip clips were attached for the guests to enjoy.

NDSC Chairman Scott Gauslow of Colfax, N.D., threw out the first pitch for the game. NDSC's logo was highlighted on the video scoreboard throughout the night, along with many NDSC message announcements over the stadium PA system. NDSC reminded game attendees about the importance of the sovbean checkoff to farmers; the importance of agriculture to the state of North Dakota; and how soybean farmers take great pride in producing food that is safe, affordable, accessible. and nutritious.



Hawkeye stopped and visited NDSC's promotional table at the June 24th game.



NDSC Director of Marketing Stephanie Sinner hands out free potato chips made from high-oleic soybeans to ballpark fans with a smile.



Ballpark guests couldn't miss NDSC's presence at the June 24th RedHawks game in Fargo. Along with the entrance banner, NDSC's soybean vehicle was parked at the front gate for all fans to pass as they entered the game. From left to right: Suzanne Wolf, NDSC communications director; Stephanie Sinner, NDSC director of marketing; Diana Beitelspacher, NDSC CEO; and Kendall Nichols, NDSC director of research programs.



North Dakota Soybean Industry Featured on KFGO's "Farm Day"

Joel Heitkamp and his KFGO radio talk show "News and Views" visited Colgate, N.D., on June 3, 2014, and featured the soybean industry in North Dakota. Along with the North Dakota Soybean Council (NDSC), the North Dakota Soybean Growers Association (NDSGA) and the Northern Food Grade Soybean Association (NFGSA) co-sponsored Joel's show, which was broadcast live from NDSGA President Jason Mewes' farm in Colgate from 8:30 to 11:00 a.m.

NDSC CEO Diana Beitelspacher talked to Joel about the value of the soybean checkoff, including efforts in the areas of international marketing and research, and the current issues of moving soybeans from North Dakota to international customers and what NDSC is doing to try and address transportation issues. Greg Endres, NDSU area extension specialist/ cropping systems, from Carrington addressed the current soybean production issues faced by North Dakota soybean farmers.

NDSGA President Jason Mewes and NDSGA Executive Director Nancy Johnson chatted with Joel about NDSGA's current projects and events. On behalf of NFGSA, Scott Sinner of SB&B Foods, Inc. and Ron Schlecht of SK Food International talked about the state's foodgrade soybean industry.

"This event was a great way to showcase the entire soybean industry in our state," says NDSC CEO Diana Beitelspacher. "All three organizations work hard to bring value to soybean farmers and strengthen the entire

industry."

NDSC provided tasty soy desserts, coffee and educational material for farmers and guests who stopped by the Mewes' farm on June 3.



From left to right: Scott Sinner, SB&B Foods, Inc.; Suzanne Wolf, NDSC; Nancy Johnson, NDSGA; Diana Beitelspacher, NDSC; Joel Heitkamp, KFGO; Ron Schlecht, SK Foods International; and Jason Mewes, NDSGA.



NDSC CEO Diana Beitelspacher and NDSC Communications Director Suzanne Wolf visit with Joel Heitkamp about the North Dakota Soybean Council, offering Joel a delicious soy cookie bar which he enjoyed.



North Dakota Media Learns More About Food Grade Soybeans

The Northern Food Grade Soybean Association (NFGSA) hosted its first media tour on July 21-22, 2014, outside Fargo, N.D. The purpose of the tour was to reach out, to build awareness about foodgrade soybeans grown in North Dakota and to educate the media about how NFGSA is working to grow the market domestically and internationally. Participation from several North Dakota media outlets included the Red River Farm Network, KQLX 890 AM Ag News, Interstate Farm Network and Agweek, along with NFGSA member companies, North Dakota Soybean Council staff members and growers.

A dinner was hosted at Grazie's on July 21, followed by a tour on July 22. NFGSA member companies estimated that 500,000 to 600,000 acres of food-grade soybeans are being grown in the Red River Valley region in 2014. With the Chinese food-grade soybean market estimated to be 10 times larger than the Japanese market, NFGSA member companies are



Mikkel Pates (left), reporter/columnist with Agweek, and Jody Heemstra (right), a farm broadcaster with the Red River Farm Network, attend NFSGA's Media Tour on July 22.

partnering to help increase production in order to meet the future demand they see on the horizon.

The July 22 tour included visiting NFGSA's food-grade soybean test plots near Kindred, N.D., and BDR Farms of Mooreton, N.D., where grower Brett Johnson explained why he chose to have a third to half of his soybean production as food-grade soybeans to keep down weed resistance and for the premiums received. Johnson highlighted that it is no more difficult to raise food-grade soybeans and that he will continue to have foodgrade soybeans as a part of his farm's crop rotation.

The next stop was Richland IFC, Inc. to tour and learn about its Dwight, N.D., processing plant. Richland IFC, Inc. President Rick Brandenburger talked about the differences in food-grade soybean varieties and traits. Bradenburger said that it has been estimated that 60 percent of the Natto in Japan is sourced from the Red River Valley of North Dakota and Minnesota. The next visit was to KTM Farms and Brushvale Seed Inc.; there was a presentation from thirdgeneration farmers and brothers Kelly, Casey and

Jon Miller. Lunch was served at their facility.

The tour wrapped up with an afternoon visit to SK Food International's plant in Moorhead, Minn., where agronomist and SK's Food Crop **Production Manager Ron** Schlecht discussed the company's food-grade soybean breeding program and plots. The tour was funded in partnership with an **Agricultural Products Utilization Commission** (APUC) grant. The NFGSA plans to continue and grow the event in the future. To learn more about growing food-grade soybeans, visit NFGSA's website: www.nfgsa.org



Soyfoods for Smart Back-to-School Lunches and Snacks

As summer comes to a close, get the school year off to a healthy start with quick and nutritious breakfast smoothies, lunch ideas that encourage kids to eat more fruits and vegetables, and snacks that pack a protein punch.

Soyfoods are versatile and affordable sources of high-quality protein. An 8-ounce glass of soymilk provides 7 grams of protein. Leading soy expert, Mark Messina, Ph.D., executive director of the Soy Nutrition Institute, notes that, in addition to being low in saturated fat and providing ample amounts of protein, "There is also

research indicating that soyfoods provide health benefits independent of their nutrient content." Evidence suggests that there are advantages to consuming about one serving of soy per day during childhood and/or adolescence. Studies from China and the United States indicate that consuming a little bit of soy each day when young may offer significant protection against breast cancer. This exciting research indicates that young girls who consume just one serving of soy per day - such as a cup of soymilk or ½ cup of tofu - may reduce the chances of developing breast

cancer later in life by as much as 50 percent.

Start the school day with a meal-in-a-glass. For fruit smoothies, add a favorite fruit, such as banana or frozen, sliced peaches, to a blender. Then, add vanilla soymilk before blending the meal and going to school. Children start their morning with a good, soyfood-rich breakfast. The protein in soyfoods helps kids feel full longer, so they can concentrate on their morning schoolwork until it's time for lunch.

For lunch, pack favorite sandwiches; add a piece of fruit or some crunchy vegetables; and finish with soynuts, trail mix that includes soynuts or a power bar that has soy protein.

Cookies are a convenient after-lunch treat, and they're easy to pack, too. Outrageous Soynut-Butter, Chocolate-Chip Cookies combine soynut butter, soynuts and chocolate chips. They provide a mid-afternoon burst of energy that can last until dinnertime for kids-on-the-go.

For more great back-to-school soy ideas for the family and a copy of the *Kids in the Kitchen: 50 Soy Snack Ideas* brochure, contact the North Dakota Soybean Council at 1-888-469-6409 or email swolf@ndsoybean.org.

OUTRAGEOUS SOYNUT-BUTTER, CHOCOLATE-CHIP COOKIES

1 cup butter 1 cup sugar 2/3 cup brown sugar 1 cup soynut butter 1 teaspoon vanilla extract 2 eggs ½ cup soy flour

1½ cups all-purpose flour
1 teaspoon baking soda
½ teaspoon salt
1 cup oatmeal
2 cups semi-sweet chocolate chips
¼ cup chopped soynuts

Preheat the oven to 350°F. Lightly grease two cookie sheets. In a medium bowl, cream together the butter, sugar and brown sugar until smooth. Add soynut butter, vanilla and eggs, stirring until well blended. In a small bowl, add soy flour, flour, baking soda and salt; blend together. Add the dry ingredients to the butter mixture, stirring until the dry ingredients are just moistened. Add the remaining ingredients, and mix until blended. Drop dough by tablespoons onto cookie sheets. Bake for 10 minutes or until the edges start to brown. Remove from the cookie sheet, and cool.

Yield: approximately 3 dozen cookies



Tech Check Your Combine

Taking a little time at the beginning of harvest can save growers a lot of headaches by taking those data and being able to make more informed decisions for that parcel of land next spring.

When it comes to data collection from the combine, you have to start up front, says Travis Kiesel, integrated solutions manager at True North Equipment's Agricultural Technical Resource Center. "You have to make sure that the machine is recording data accurately. If we record poor yield data, it's awfully hard to fix that on

the back side."

Kiesel stresses the importance of making sure the yield and moisture calibrations are done correctly. He encourages producers to do a yield calibration at least once a season for every crop.

With the recent advances in technology, Kiesel says that yield calibrations have become pretty easy. "When a producer dumps a load of grain into a grain cart or semi, they record that load, and when it goes to town and gets weighed, they can take the business-band radio message back



Travis Kiesel

from the driver and put the actual weight into the display of the combine."

With a John Deere machine, Kiesel says it requires three-to-four successful hoppers, or loads, to do those yield calibrations. The machine will make the small calculation adjustment on how it's determining the flow of material to determine how much weight is actually being harvested.

GPS knows where the combine is in the field, along with the position of the bean platform, so the GPS records information as the combine goes down the field. If a grower gets halfway through a field and shuts down for the evening, or for a day or two due to weather, he can come back and start harvesting that field and can continue recording accurate data at the exact point where he stopped.

During harvest, farmers just want to run, and time is of the essence. Kiesel says that it's worth taking a little extra time as you get started to do in-field, on-ground checks of seed loss. "I can't explain how important those are because you can see where you're losing product and product obviously is extra money in your pocket, so it's important to capture every soybean you can," according to Kiesel.



Soybean Storage Tips

Given the expected increase in the amount of soybeans that will be stored this season, it's important to get some advice about how to properly store them. But, first things first. Dr. Ken Hellevang, North Dakota State University Extension agricultural engineer, thinks that, this year, we're looking at a fair amount of old-crop grain that will be in storage either until this fall's harvest or for the long term. Hellevang says that it is important to monitor the condition and temperature of that grain. "The goal as we go into fall will be to continue to try to keep the grain cool by periodically running the fan at night." Another thing to look for is insect infestation.

When putting soybeans in the bin off the combine, Hellevang says that the goal is to make sure they're dry and then to control the temperature. As growers are well aware, some years, it's a real challenge to harvest dry soybeans. "Air drying is one option, but drying soybeans brings a lot more challenges than drying some of the other grains," according to Hellevang. "We need a lot of air flow, at least as much fan horsepower as corn or wheat."

If farmers use a hightemperature dryer, Hellevang says that they



Ken Hellevang

need to be cautious about the maximum temperature they use because sovbeans are much more prone to seed-coat breakage and damage. Generally, the limit is 150 to 160 degrees, a temperature that still causes a fair amount of breakage during the drying process. Growers planning to sell in specialty markets really need to do their homework before using hightemperature dryers, adding very little supplemental heat.

Asked what the ideal moisture content of sovbeans going into storage is, Hellevang says that they're traded at 13 percent moisture which is adequate over the winter, but if we plan to store beans into next summer, they need to be closer to 11 percent. Regarding grain temperature, as outdoor temperatures are cooling, the soybeans should be cooled to eventually just below freezing for winter storage.



John Gnadke

John Gnadke, a harvest management consultant with AGS, Inc., Ankeny, Iowa, says that one common mistake farmers make is not running their aeration fans to cool down beans at 10 or 11 percent moisture for safe storage.

Farmers must first understand their airflow and how long it takes to run the fans. For example, Gnadke says that, if the fans only run during the night with one-half a cubic foot per minute (CFM) of air, it would take four 12-hour days to drop the temperatures about 10 degrees. Try to get the temperature of the beans down to about 35 degrees "because soybeans at 10 percent at 60-65 degrees will go into a sweat and get white mold and eventually rot," according to Gnadke.

Green soybeans can be a big storage problem.
Hellevang says that, if we put green beans in the bin, they will stay green.
"That's a real problem

because that green color will continue into the processing and will greatly reduce the value of the end product, so green beans get discounted pretty heavily."

Hellevang encourages farmers to harvest when the beans will be close to 13 percent moisture, instead of 9 or 10 percent, or even drier. Soybeans seem to change moisture pretty readily. "If they get rained on, they re-wet quite a bit. They might be 16 percent one day, and then a couple days later, they're down to 11," says Hellevang. Soybeans are more challenging to harvest because of that rapid moisture change, and it really does show up in the amount of mechanical damage during harvest.

He cautions farmers who want to use fans to bring the moisture content back up closer to 13 percent. "That is very risky. We can't just turn on the fan when we have foggy or very humid weather because the moisture will go back in in a front, just like it does when we're drying the grain," says Hellevang. "That zone will move from bottom to top if we're pushing the air. It's a very slow process; the moisture doesn't go in any more rapidly than it comes out, and as the moisture goes in, the beans swell or expand,

increasing the pressure on the bin wall."

Gnadke says that he had a million-bushel bin in the state of Mississippi that was all rotten. "Soybeans have so much green material there; growers harvest at 95 degrees in August," says Gnadke. "And in a million-bushel bin, 135-foot diameter, you get up to 6 feet of green material between the beans and the wall, and that's silage."

Gnadke wrote the aeration systems protocols for Pioneer's bulk soybeanseed storage that includes checking the moisture and temperature of every truckload. A farmer who had white mold one year delivered a truckload of beans at 65 degrees while the rest were 40 degrees. Gnadke says, "It's just like the rotten apple. If they've got a 6,000-bushel bin and they put in 4,000 bushels of beans that were harvested in cool weather, and then, they harvest one day in warmer weather, and they're all over-dried to begin with, that warmer day that they harvest is going to ruin the whole bin."

Running the fans at night will not dehydrate the beans anymore because the relative humidities at night are higher than is usually needed to have 13-percent moisture beans, according to Gnadke.

DuPont Young Leaders Participate in ASA Board Meeting, Meet with DuPont Leadership

Joe Ericson of Wimbledon, N.D., was one of the select members of the 2014 class of ASA DuPont Young Leaders who held July meetings in Washington, D.C., and Wilmington, Del.

Adam Cloninger, Arkansas; Andrew and Savannah Moore, Georgia; Matt Hinderer, Michigan; Michael Petefish, Minnesota; Ericson; Jay and Alice Ann Yeargin, Tennessee: and Jonathan Gibbs, Wisconsin. participated in the ASA **Board of Directors** Meeting, attended the Legislative Issues Forum and made Capitol Hill visits with their respective states' representatives. Young Leaders then traveled to Wilmington, Del., where they toured DuPont's Stine Haskell Research Facility, interacting with Rik

Miller, DuPont Crop Protection president, and Ed Makowski, director of marketing. Young Leaders also toured DuPont's Chesapeake Farms.

The Washington and Wilmington program is an optional final phase of the ASA DuPont Young Leader Program. Participants submitted an application to participate in this phase of the program.



Participants in the final phase of the DuPont Young Leader program included, left to right, Michael Petefish, Minn.; Adam Cloninger, Ark.; Matt Hinderer, Mich.; Joe Ericson, N.D.; Alice Ann Yeargin, Jay Yeargin, Tenn.; Jonathan Gibbs, Wis.; Savannah Moore, Andrew Moore, Ga.

Inaugural Jamestown Golf Tournament

Thank you for making the Inaugural Jamestown Golf tournament successful! The tournament is a way for the North Dakota Soybean Growers Association to say thank you to members and supporters. Your membership dues and sponsorship of NDSGA events help 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 of the tournament, check out facebook.com/NorthDakotaSoybeanGrowersAssociation

CONGRATULATIONS TO OUR TOURNAMENT WINNERS

First Place: Brandon Stahlut, Tracy Gustafson, Myles Torgerson and Nick Blaskowski

Second Place: Chad Fyre, Kasey Lien, Kevin Dockter and Geoff Lien

Third Place: Gannon Vangilder, David Barnick, Mike Stoller and Brian Carlson

Longest Putt: Bob

Kvistad

Longest Drive: Mike



Wooster

Closest to the Pin: Dakin Bushner

THANK YOU, GOLF TOURNAMENT SPONSORS

Hole Sponsors:

AgCountry Farm Credit Services; Anderson Bros., Inc.; Centrol, Inc.; Crop Production Services/ Dyna-Gro Seed; DuPont Pioneer; FMC Ag Products; Gavilon Grain; Innovative Agronomy; Mustang Seeds; National Biodiesel Board; Proseed; SDR Consulting/Prairie Assisted Living; Sky Farmer Ag Services; Titan Machinery; Valley Crop Insurance Inc.

Lunch: BNSF Railway **Beverage Cart:** Monsanto BioAg, Inc.

Program: DuPont

Pioneer

Dinner: N.D. Soybean

Council

Welcome Bag: BASF

Player Carts: National Biodiesel Board

Golf Balls: Asgrow **Golf Towels:** Monsanto

BioAg, Inc.

Signs: D-S Beverages **General:** Brushvale Seed, Inc.; Pride of Dakota



Consider a Cover Crop

Dr. Abbey Wick, North **Dakota State University** Extension soil health specialist, says that growers who have acres they couldn't get planted this year have to think about next year's crop. "So, if they can prep the land this year for next year using cover crops to use up water, to help build up some of the root channels to get water to flow deeper into the soil, the main thing is to use water on these fields to get them ready for next year."

Salts in the soil are a big issue, and Wick says a lot

of the fields that are wet have salts. She thinks we're getting set up this year with all the moisture that's been leaching the salts down in the soil profile. "The salts are pushed down," says Wick. "If they (farmers) can get something growing on that land this year, using water, it might be in better shape next year."

If the water has nowhere to go in the fields, if there are compaction layers preventing the water from moving through the soil, the water sits on the surface until it evaporates.

If there is a plant there, the root channels help the water move down, but the plant also transpires water and releases it to the atmosphere, using it for biomass to grow.

Josh Messer, agronomist with Plains Grain and Agronomy in Enderlin, N.D., says there is a lot of work on cover crops going on. In the past it's been cattle producers looking to get some additional grazing after their small grains were harvested. Messer has farmers that have been using cover crops for about five years

now, and he's seeing some soil health benefits.
"There's millions and millions of organisms that survive off the microrrhiza that are produced by different plants," says Messer. "The more plants that we can get out there to produce microrrhiza, the better activity we get in our soils and the healthier our soil is going to become."

In a wet year, Messer says those microrrhiza have to go dormant on unplanted acres and have nothing to feed on. "So, if we can get a cover crop on those acres, get some organic matter put back in there and get that microorganism activity going, it's going to benefit you tremendously going into the next cropping season."

If you've never used cover crops, it's not easy to figure out how to incorporate them. Wick is telling growers that the first step when using cover crops is to figure out what the goal is. "Is your goal to use water? Is your goal to keep the salts down? Is your goal to build soil health? If the farmers can pick out what their goal is, then we can help design, and the seed companies can help as well, help them pick a mix of cover crops that will serve those needs."

It's also important to check with the Farm Service Agency and your crop-insurance agent to make sure you're in compliance.

NDSGA AWARDS INAUGURAL \$5,000 SCHOLARSHIP

Ty Bruner of Drake, N.D., is the winner of the inaugural 2014-2015 North Dakota Soybean **Growers Association** (NDSGA) Scholarship. A junior at North Dakota State University, Bruner is majoring in agricultural economics with a minor in crop and weed science. The NDSGA Scholarship is a \$5,000 award that is presented to an outstanding upperclass student at NDSU who is majoring in an agriculture-related field.

"There are tons of opportunities in agriculture," says Bruner. "There aren't that many scholarships for upperclassmen, especially for



this amount. I am very thankful to receive this support."

Bruner already spends most weekends working with the family's soybean, corn, wheat and Black Angus operations. For the short term, he plans to work in agriculture somewhere close to the farm so that he can continue to be involved. Long term, he plans to farm and ranch with his older brothers.

"NDSGA is pleased to offer this opportunity to an exceptional student," said NDSGA President Jason Mewes, a soybean producer from Colgate, N.D. "The agriculture industry has a bright future thanks to dedicated young people like Ty."

The NDSGA Scholarship is a membership benefit. Each year, this scholarship will be awarded to the child or grandchild of an NDS-GA member. For more information, see www. ndsoygrowers.com.

Yield Results: How to Interpret and Make Better Decisions

BY ERIC NELSON, TECHNICAL AGRONOMIST, ASGROW/DEKALB

selecting seed for next season, be certain to choose products that are proven performers. Understanding performance potential will involve some research. To access yield data, begin by looking online or contacting your local seed representative. You may also consider looking at independent and university performance trials to see how certain products performed in a range of different locations and scenarios. These tests are generally conducted by maturity range with seed from a broad array of sources and tested across a variety of growing conditions within a state or region.

EVALUATE MULTIPLE LOCATIONS

Data from a single plot location near one's farm is only one snapshot of performance, and may not provide a complete picture of product potential. Products may yield well at one location and poorly at another. Weather, insect pressure,



ERIC NELSON

and fertility are just a few variables that can affect product performance across locations. Therefore, evaluating products across multiple locations allows the greatest opportunity to get an accurate picture of performance and consistency. If there is data available, an evaluation of product performance across years is also beneficial. Visiting your local Asgrow/ DEKALB yield trial site will give you valuable information about products that are performing well on a variety of ground similar to your farm's.

EVALUATE MULTIPLE SCENARIOS

Field management can also affect product performance. Take a look at the field history. When was the field planted? What was the crop rotation? How much tillage was involved? Was a soil insecticide used? How were weeds controlled? What traits were in the seed and how did they contribute to yield?

SEEK HEAD-TO-HEAD COMPARISONS

When trying to determine if one product is superior to another, compare the product not just at one plot, but many. You may find that one product consistently outperforms the other.

In large plots with many entries, it may be tempting to compare two products in the same plot. However, if Product A is entry #3 and Product B is entry #15, it may not make sense to compare the two when they are located so far from each other in the plot. If periodic check strips are planted in a field, it is better to compare each product to

the nearest check. A check product is to be used as a reference in comparing the yields of products that are in close proximity to it. The purpose of the check is to provide a relative measure of performance in that general area of the field. When the check is yielding well, you would expect neighboring products to also respond closer to the higher end of their yield potential. Conversely, if a check is not performing well, the neighboring products would be demonstrating their yield potential within that non-optimal part of the field.

STATISTICAL DIFFERENCES

Statistical differences signify that the results are unlikely to have occurred by chance and have a high probability of repeating themselves. If yields are not determined to be statistically significant, it indicates that the differences due to seed products are not large enough relative to the experimental variation in the field.

University and

Asgrow Agronomic Spotlight

independent plot results may include a least significant difference factor (LSD). The LSD indicates what amount of yield variation can be attributed to the product itself versus influence from outside factors. Yield differences greater than the LSD can be attributed to actual

differences in genetic yield potential of products. Yield differences less than the LSD are not considered statistically different and are likely due to outside factors. Often, you will find the LSD at the bottom of the yield table in performance trial results.

IDENTIFY DIFFERENCES NOT RELATED TO THE SEED

Plot results may include differences in yields that can come from variations across a plot test site.

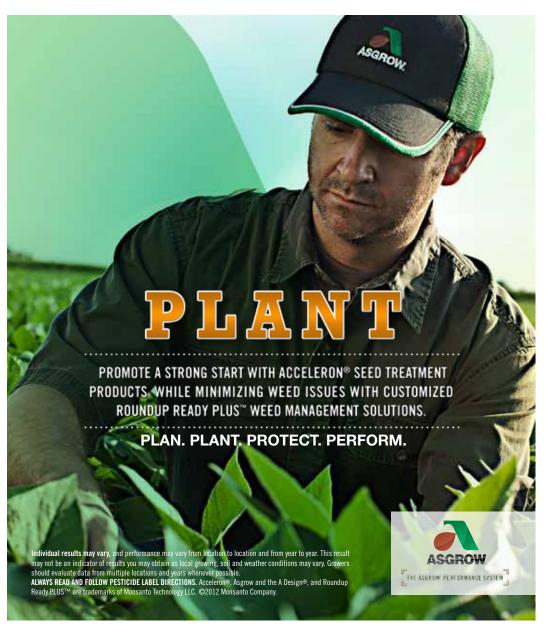
These differences could include drainage, previous crop, fertility, and compaction. Care should be taken to identify how

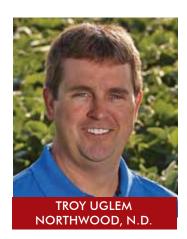
much of the yield variations reported may be attributed to these other field factors not related to the seed choices.

In summary, yield trials can provide important information that can help you select quality seed products for the next season. The following are good suggestions:

- Evaluate Multiple
 Locations to help
 achieve the most
 accurate look at
 product performance
 and consistency.
- Look at Field History.
 Management practices such as tillage or weed control may have had an effect on overall performance.
- Seek Head-to-Head Comparisons.
 - -- Compare products at multiple locations.
 - -- If applicable, compare each product to the nearest check product in close proximity to it.
- Consider Statistical
 Differences and
 Reliability. LSD is a
 value used to
 determine if plot values
 are statistically
 different.

To find out more information about the best products for your farm, visit agseedselect.com or work with your Asgrow/DEKALB seed dealer.





Tell us about your farm. Our farm is a fourth-generation, small-grain and row-crop farm near Northwood. We raise wheat, corn, soybeans, dry edible peas, black turtle beans and spearmint. We raise a variety of crops to diversify our operation and spread our risk.

Why did you get involved with the North **Dakota Sovbean** Council? I enjoy being a part of the N.D. Soybean Council. I think it is interesting to see the many ways the checkoff dollars are invested to benefit N.D. soybean growers. It is amazing to see the many uses soybeans have and new markets that are being developed for them. The N.D. Soybean Council does a great job of promotion and education of agriculture, and I appreciate this as a grower myself. I was first elected to the Council in 2012.

What are the other

organizations with which you have been active? I am a member of the volunteer ambulance and fire department. I have served on the Northwood City Council. I am a member of the **Grand Forks County** Marketing Club and also the N.D. Corn Growers. I am also a member and a former board member of our county Farm Bureau. I have also been a Boy Scout leader. In 2012, my wife, Bobbie, and I were awarded National **Outstanding Young** Farmer by the **Outstanding Farmers of** America Fraternity.

Why are soybeans a part of your crop mix? Soybeans have been an important crop in our operation for years. They are a crop that is always in demand due to its many uses and the strong foreign demand. I feel that, in the future, the soybean is only going to increase in the versatility of uses and demand for feed and food, so I will continue to grow them and use them in my crop rotation.

If you could add any new equipment or technology to your farm, what would it be? I feel that technology is the future of agriculture, and I would like to add telematics to my operation to connect everything together. With a growing farm, being

able to have the ability to check on different areas of the operation without driving to them could be very beneficial. I feel the future of technology and agriculture are wide open, and I want to keep progressing with the times to better the future of my operation for coming generations.

What's the one piece of farm equipment or technology you wouldn't want to be without? The one piece of equipment I can't live without is my smartphone. It seems like a cliché nowadays with the smartphone attached to your ear, however, I have found it to be vital to my operation. The smartphone allows me to check the weather, markets and email. It also allows me to stay connected to my employees, crop consultant, co-op and family. My office is wherever I am, and I love it. The smartphone has made it that much easier for me to run my farm business from the inside of a tractor to standing in one of my soybean fields.

What changes do you expect to see on your farm in the next 5 to 10 years? I think the biggest changes I expect to see will be bringing the next generation into the farm. My children are starting to express interest in farming, and I want to afford them the

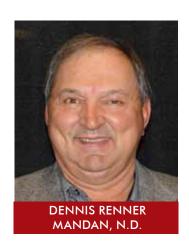
opportunity if they so choose to come to the farm and make it their life passion. I also think technology has changed our operation greatly from my father's generation to mine, so it is endless as to what it will look like for the next generation.

Do you have any hobbies? Some hobbies that I enjoy are hunting, spending time at the lake with my family, traveling and coaching my son's basketball team.

What's your favorite food? My favorite food is a good grilled steak.

If you could win a vacation, where would you want to go? If I could win a vacation anywhere, it would be Hawaii.

What do you like best **about farming?** The best part of farming is that I am doing what I love, and I am able to raise my family in a rural setting. There are so many opportunities in agriculture right now, and I love the challenge of farming. I can truly say that, when I go to work in the morning, I will never repeat the day before, and from year to year, it is always different. I thought about other careers, and I worked other places right after college, but I could never get the farm out of me. I think because farming is more than just a job; it is a lifestyle.



Tell us about your farm. I'm the fourth generation to farm in this county and the second generation on this farm. We raise wheat. sunflowers, barley,

canola, corn and soybeans.

Why are soybeans part of your crop mix? I decided to try some, and I found they worked well in our area. It spreads out the workload, and it's also nice ground to come back on the following year.

Why are you part of the North Dakota Soybean **Growers Association board?** I've been on the Council or the Association boards several times since 2002.

What are the other organizations with which have you been

involved? I served in the state legislature for three sessions. I'm a member of the North Dakota Grain Growers Association, I'm a board member for the **Crop Improvement** Association.

If you could add a new piece of equipment or new technology to your farm, what would it be? We've been upgrading our tractors with the John Deere guidance system. We have two units, and I'd like a third one.

Hobbies? What do you do for fun? I enjoy traveling in the winter

months. We haven't done much, but we're doing more going to visit family.

What's the best part of farming? Why did you get into this business? I enjoy planting crops and watching them develop. It's a challenge every year to get them marketed at a decent price. It's been a rewarding career for me.

If you could win a vacation to anywhere, where would you go? I enjoy the East Coast. It has the early history of our country.

Favorite food? A good ribeye steak.

FOOD *FUEL

WITH SOYBEANS, WE DON'T HAVE TO CHOOSE.

U.S. soybean farmers grow versatile and renewable soybeans to help meet food, feed and fuel demand globally. Soybeans are one of many choices we have to meet a range of needs for protein, as well as fats and oils. That's good news, because when it comes to providing food or renewable alternatives to petroleum, we don't have to choose. Here's a look at how soybeans in the United States are being used.

soybean component component of is oil. soybeans is meal.

97% ANIMA



97% of U.S. soybean meal is used to feed poultry and livestock.

FOOD PRODUCTS

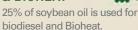


3% of sovbean meal is used in food products like protein alternatives and soy milk.

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