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INSIDE Precision Ag: Farming in the Clouds. Page 20





MEMBERSHIP APPLICATION

To join ASA and the North Dakota Soybean Growers Association, complete and return this application with payment. SAVE TIME AND POSTAGE. JOIN ONLINE AT www.SoyGrowers.com

APPLICANT INFORMATION (Please Print)

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DATE OF BIRTH:
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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.



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



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Membership Pays

Whether it's a new piece of equipment, a quarter section of land or adding tile to an existing piece of ground, farmers are always looking for a return on their investment. Milnor, N.D., farmer Ed Erickson, Jr. has seen a return on his investment for his membership in the North Dakota Soybean Growers Association.

As if being represented in Washington, D.C., and Bismarck weren't enough of a return, Erickson took advantage of the discount on new vehicles available to NDSGA members. "I needed a new pickup anyway," says Erickson. "And after I saw the savings, I couldn't afford not to trade."

Erickson earned a \$7,500 discount on his new Dodge Ram pickup and was still able to take advantage of additional discounts from Dodge. His total savings amounted to some \$11,000, almost 20 percent of the manufacturer's suggested retail price (MSRP) for his pickup.

For \$200, Erickson became a three-year member of the North Dakota Soybean Growers Association, which automatically makes him a member of the American Soybean Association and the National Biodiesel Board.

"If we can talk to soybean growers and tell them about the value of our membership incentives," says Erickson, "then we can discuss what we do in Washington, D.C., and Bismarck. Most farmers are just like I was when I first started on the Soybean Growers board; I had no idea what we were doing in Washington, D.C." Erickson says that, when soybean growers are told about the membership incentives, many times their next question is about what else we do, which opens the door to tell them about lobbying on their behalf.

Erickson, who represents NDSGA on the American Soybean Association (ASA) board, serves on ASA's membership and corporate relations committee. He's worked closely with Jennifer Weaver of the National Biodiesel Board to explain the incentive program to soybean growers. "I thought it was a perfect way for us to get our message out and get our name out, not only to target farmers for memberships, but also small town store owners, whoever."

In addition to informing soybean growers about



Ed Erickson, Jr.

new vehicle discounts from Ford, GM and Chrysler, Erickson admits that more effort is needed to educate the auto dealers. Because of this program, Erickson says membership in the NDSGA and ASA has jumped dramatically. Another thing Erickson

and his committee have been working on is ASA's AchieveLinks which allows NDSGA members to shop online at more than 850 participating companies and to get discounts.

As these Links Reward Points accumulate, members are able to redeem the points for all kinds of exciting musthave merchandise and once-in-a-lifetime experiences. These points can also be used to pay ASA membership dues and to make a donation to the not-for-profit World Soy Foundation.

In addition to the Links **Reward Points, ASA** members can earn additional rewards faster with their own personal ASA-AchieveLinks VISA®. With the ASA-AchieveLinks VISA, you get everything you expect with a VISA card, and you also earn additional Links **Reward Points on all** purchases made with the card, including when you shop online through the AchieveLinks merchant partners.



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CREATING COMMUNITY LEADERS

The rush is over; the machinery is in the shed; the crop is in the bin; and as you look forward to the holidays and the start of a new year, I hope you can look back at a profitable year. The year was full of challenges and opportunities, and as farmers, we made every effort to help our crop reach its full potential. As an association, it is our job to help you reach yours.

The mission of the North Dakota Soybean Growers Association (NDSGA) is to "create partnerships to improve the quality and profitability of N.D. soybean growers while developing community leaders." Although the work that is done in Bismarck and Washington, D. C., is our primary focus, we should never underestimate the importance of creating new leaders in our communities. The American Soybean Association (ASA) and the NDSGA offer an abundance of opportunities for individuals who would like to further their leadership skills. The DuPont Young Leader Program, Soy Leadership College, Soy Leadership Forum and Leadership at Its Best are programs that focus on taking your skills to the next level. The skills that you learn do not just apply to Association leadership, they apply to leadership in your communities as well.



Jason Mewes, President North Dakota Soybean Growers Association

Every community offers a number of ways for you to become involved. It could be your township board, school board, city council, church council, youth group, etc. Without effective leadership, these groups can languish and become ineffective. If we want to see our communities stay strong and prosper, it is imperative that we have people who are willing

and able to lead them. Strong leaders help provide guidance and create a better path forward for everyone. What does it take to be a strong leader? What skills do most leaders possess? I believe in the 7 Cs approach for

effective leadership.

- 1. Commitment: willing and able to do what it takes to succeed
- 2. Conviction: knowing your values and abiding by them
- 3. Courage: standing tall in the face of adversity
- 4. Clear Vision: possessing a vision of what your group can achieve and how to do it
- 5. Consistency: knowing what to expect from leaders and the group realizing that it can depend on those actions
- 6. Consensus Building: taking different ideas and merging them into a plan that everyone will support
- 7. Communication: having the ability to share your thoughts with the group and also to listen to others' thoughts

Although leaders can come in all shapes and sizes, they tend to possess most of these qualities. Now, think about yourself for a minute. How many of the 7 Cs do you possess? If you are a farmer, I bet it is most of them.

The traits and skills of an effective leader are very similar to those of a successful farmer. We use many of the same ideas in our everyday lives on the farm. Therefore, farmers can easily become effective community leaders if they put their mind to it. If you don't step up to lead, who will?

As we close the book on 2013, we can start to look forward to all the challenges and opportunities that 2014 will bring. As farmers, we will do our best to help next year reach its full potential, and with your leadership, you and your community can reach yours.

HAPPY HOLIDAYS



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Myers Represents Ag Industry on NDSGA Board

AgroValley Solutions owner Jay Myers is no stranger to the North Dakota Soybean Growers Association boardroom. Myers has been on the board for a little over 10 years, first as a farmer representing Richland County for 6 years. He was then appointed to the board as an industry representative because he owns a fertilizer business based at his rural Colfax farm.

"The majority of the business is liquid fertilizer. We've been with that for a little over 8 years. We have our own trucks to deliver to the farms; most of it is factory-direct right to the farm." AgroValley Solutions sells seed treatments, adjuvants and liquid nitrogen; it also sells side-dressing equipment and liquid attachments for planters.

Myers made the decision to start AgroValley Solutions to keep his employees and his trucks busy during the off season. He decided to serve on the NDSGA board after one of his neighbors asked him to consider it. "I've learned a lot about how the membership is out working for all the farmers. I've been to Washington many times lobbying for the Soybean



Jay Myers has served on the NDSGA Board of Directors as a farmer and an industry rep.

Growers, so I've learned a lot about politics."

Myers says that it's important for soybean farmers to be members of their association. "I think a lot of farmers think somebody's doing it, but they don't really know what all is involved. I've been in it long enough to know firsthand that it takes some work and it takes all the farmers being involved. That's probably our biggest challenge is getting as many farmers on board."

Myers is also completing his first year as a representative on the United Soybean Board (USB) as one of North Dakota's three USB representatives. "I've known how the checkoff dollars are spent just from my association with the Growers Association, and now, it's real interesting to learn how some of the ongoing and new projects that affect the profitability of soybean farmers work. That's what we're all working for."

"North Dakota was one of four states that funded a 2012 study on how the biodiesel industry has affected our soybean price," says Myers. "It (the study) showed a 74-cent per bushel increase in the price of soybeans because of biodiesel." Myers serves on USB's Oil Action Team which is currently working with the higholeic oil program.

"Most of that will start in Illinois because that's where they're working on current varieties. But within a couple years, we might have a variety that works up here, and we also have that crushing plant in Enderlin. Maybe they'll start crushing high-oleic soybeans because they're already doing it with sunflowers and canola. That could be an opportunity for this area."

High-oleic oil is healthy for human consumption, plus, Myers says, it provides three times the life of regular soybean oil in terms of fry-ability. "We're also funding some studies on using higholeic soybean oil to make high-quality engine oil, so that could be something huge, too." Myers has been farming since 1988, his last year in college, and currently plants about three-fourths of his acres to corn and about 25 percent to soybeans. All his beans are for seed production for a couple different companies.

Myers has incorporated real time kinematic (RTK) and autosteer on all his tractors, and this is his first year with autosteer on the combine. "This technology isn't a luxury. It allows me to get new, inexperienced operators to come in and operate the grain cart without having to steer."

Myers can also assess different varieties on monitors in his combine as well as comparing yields in fields that have been tiled with fields that haven't. He also uses a phone app to monitor the operation of his grain dryer.

"We had a guy out in western North Dakota that was strip-tilling and wanted a nitrogen stabilizer from us that he's used in the past," says Myers. "I was combining corn with autosteer, talking on the phone taking an order, going on the internet and sending an email for this order, probably while we're unloading corn on the go. My wife is in the grain cart working on that order, talking to the customer; it's a little bit of multitasking going on."



Myers monitoring his grain dryer on his Colfax, N.D. farm.

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Capitol Update

Rural North Dakota road and bridge rebuilding has started in earnest and will continue next year. Comprehensive study activities for the state's entire road transportation system will conclude next June, in time for use by the 2015 legislative session. According to North Dakota Soybean Growers Association Legislative Director Scott Rising, the successful rebuilding of our state's core infrastructure remains one of NDSGA's primary objectives.

Education funding initiatives, for both K-12 and higher education, are also being evaluated by the respective interim

PR

200 TOTAL SOYBEAN . 60 TOTAL CORN

20 TOTAL SUNFLOWER • 16 TOTAL CANOLA

committees. Efforts are focused on the successful resourcing of the core curriculum for K-12 and evaluating the new Performance-Based Measures system in higher education.

Rising says that increasing oil tax revenues have accelerated the implementation of needed improvements across North Dakota that will culminate in the stabilization and then the reduction of property tax loads long carried at the local levels.

2014 is an election year, with state primary elections on June 10th and the general election in November. Candidate petitions can start to be

circulated after New Year's Day.

Partisan elections will include a U.S. House member, and in North Dakota, an agriculture commissioner, attorney general, tax commissioner, secretary of state, and a public service commissioner will be elected in 2014. The 24 odd-numbered District State Senate and 48 House seats will be contested, plus a full slate of county positions in November and township positions on March 18th.

No-party ballot elections will include a

Supreme Court justice and a host of District Court judges. Both the primary and general elections will have constitutional measures for your consideration.

Rising says there are many opportunities for you to serve, either as a candidate or helping those who choose to compete. "Being involved increases your understanding of the people elected and the process," says Rising. "Electing our leadership is a participative event, not a spectator sport."



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25 TOTAL SUNFLOWER • 20 TOTAL CANOLA(2)





Olson Attends National Leadership Development Program

Part I of the Leadership at Its Best Program, co-sponsored by Syngenta and the American Soybean Association, was recently held in Minneapolis, Minn. Craig Olson, a producer from Colfax, N.D., and a North Dakota Soybean Growers Association director, joined 14 other state association leaders to participate in advanced leadership training. This leadership development training provides the skills necessary to be an effective voice for the U.S. soybean farmer. Participants were trained in media relations, public speaking skills, soybean industry policy issues, future trends, social media training and



Craig Olson, lower right, interacted with fellow participants during a session at Syngenta's office in Minnetonka, Minn.

organizational leadership. They also networked with fellow producers representing the National Corn Growers Association. "It is wonderful to come to Leadership at Its Best and witness the devotion these leaders have for the soybean industry," says



ASA First Vice President, Ray Gaesser of Iowa. "Because they are willing to invest their valuable time in Leadership at Its Best, I have no doubts that they will be even stronger leaders and spokespersons for U.S. soybean growers."

Part II of Leadership at Its Best will be held in Washington, D.C., in conjunction with the ASA national board meeting on March 10-12, 2014. During that time, Olson, along with the other program participants, will continue leadership development training and meet with their states' members of Congress to discuss key policy issues affecting soybean producers and the soybean industry.





Diana Beitelspacher Chief Executive Officer North Dakota Soybean Council

DEAR VALUED SOYBEAN PRODUCERS:

As we gather with friends and family during the Thanksgiving holiday, we give thanks for the blessings in our lives and for the people who provide us with support and guidance. From a Council perspective, I am especially thankful for people who are willing to serve our organization and who accept their governance roles and duties as an honor and obligation. To those who serve on our Board and to those who serve on the boards of other organizations, I share this poem titled "If" by Alexander Swallow with you as a tribute to your service.

I wish you and yours a safe, happy and memorable holiday season!

If you can keep your head when all about you have read the briefings five times to your one, If you can trust yourself when all men doubt you and feel that your duty has been done; If you can wait and not be tired by waiting, and plan ahead so your intentions don't surprise, If you let your brain be constantly creating, and yet don't look too good, nor talk too wise;

If you can dream and not make dreams your master, If you have patience for the long-term game, If you can meet with Triumph and Disaster, And treat those two impostors just the same; If you can bear to hear a new agenda topic when your stomach rumbles and you've a train to catch, If the finance sheets are making you myopic, but you're determined that they've met their match;

If you can keep your mind fixated, on those the charity's there to serve, If you're working harder than anticipated, and you approach the lot with vim and verve; If you keep fellow members smiling when your own is wearing thin, And hang in there when the pressure's piling, and take your setbacks on the chin;

If every time one's added to your number, you've bothered to make them feel at ease, If you can drag others from their slumber, to see the options you must surely seize; If you can fill the unforgiving meeting, with two hours' worth of good work done, Yours is the Earth, and everything that's in it, and - which is more - you'll be a Trustee, my son! [or daughter!]

NDSC Seeks Leaders to Represent North Dakota Soybean Farmers

In 2014, the North Dakota Soybean Council (NDSC) will be seeking four soybean farmers to serve on the NDSC Board of Directors, and represent fellow soybean farmers and the industry.

"Being a North Dakota Soybean Council director is a great experience in many ways," says Charles Linderman, an NDSC board member from Carrington, N.D. "You have the opportunity to learn many interesting things about your farm, the soybean industry, travel to interesting places, and meet interesting people, all the while having the satisfaction that you are making a positive difference for you and your fellow soybean farmers."

How do the Elections Work?

The process is conducted by mail ballot. Soybean farmers that reside in counties that are up for election in 2014 will receive instructions regarding NDSC's election process via mail in the coming months.

Roles and Responsibilities of NDSC County Representatives • Serve as a liaison

between county soybean farmers and the NDSC Board of Directors.

 If possible, attend educational and leadership opportunities sponsored by NDSC that are held in the County Representative's county.

Roles and Responsibilities of NDSC District Representatives

• Elected County representatives move on to a District election, where a District representative is elected to serve on the NDSC Board of Directors. Responsibilities of NDSC board members include, but are not limited to:

- Attending at least four board meetings a year that are held in Fargo.
- If assigned to participate on a board committee, attending all scheduled committee meetings.
- If appointed by the board to represent NDSC on outside boards or committees, attending all scheduled meetings at the expense of the NDSC.
- Attending/

ELECTIONS WILL BE HELD FOR:

DISTRICT 2: Ransom and Sargent Counties

DISTRICT 8: Nelson, Griggs, and Steele Counties

DISTRICT 10: Cavalier, Pembina, and Walsh Counties

DISTRICT 12: SW Counties (see map)

Districts with a star will have elections in 2014



participating in educational and leadership opportunities sponsored by the NDSC.

Areas of Focus for the Soybean Industry

As an elected representative to the North Dakota Soybean Council, you will help guide the N.D. soybean industry in the areas of domestic and international marketing, research, transportation, producer education/ communications and consumer awareness.

"Serving on NDSC is an opportunity to make a difference and [to] impact the soybean industry through its marketing and educational efforts as well as identifying research projects that address production, domestic and industrial uses, and trade missions that create new markets for our soybean growers and build stronger ties with our current customers," says N.D. Agriculture **Commissioner Doug** Goehring.

If farmers have questions regarding the election process, please feel to contact the NDSC office at 1-888-469-6409 or by email at dbeitelspacher@ ndsoybean.org.

Development of the NDSU Pest Management App

As technology advances, information delivery can be enhanced. NDSU Extension Specialists update and print the Weed Control, Fungicide, and Insecticide Guides on an annual basis. In the next couple of months, the printed versions

will not be the only place where this information can be found. For the past year, the NDSU Pest Management app for mobile devices has been developed. The app consists of selected information that is found in the Guides, but in a dynamic and searchable format. The app is designed for ease of use to provide growers with another tool as they make field decisions. The North Dakota Soybean Council is supporting the project by funding the web version of the app, and several commodity groups are funding other app features or the input of information for their respective crop.

The app provides several benefits for the user compared to the print version. The app can be updated throughout the year as opposed to an annual basis. The app is searchable within each category, giving users a quick way to find a pest or management aid quickly and efficiently. General information from the guides and resources that



may be helpful for producers is also included as supplemental information. There are also special tools specifically designed for the weeds section of the app to provide herbicide efficacy ratings about specific weeds and crop rotation restrictions for herbicides with residual properties.

The app will be available for the iPhone, iPad, Android smartphones and tablets. The app will be free because funding for the project was generously provided by the North Dakota Soybean Council, the North Dakota Corn Growers Association, the North Dakota Wheat Commission, the Sugarbeet Research and Education Board, the National Sunflower Association, the Northarvest Bean Growers Association, and the Northern Plains Potato Growers Association. The app is still in development with plans for launching sometime during the winter months.

Contributed by Angela Kazmierczak, NDSU

NDSC Travels to China to Strengthen Relationships, Expand Markets

Ninety-five percent of North Dakota's soybeans are exported, and soybean exports to China represent a major component of North Dakota's agricultural economic power. Nine representatives of the North Dakota Soybean Council (NDSC), led by Diana Beitelspacher, NDSC CEO, and Scott Gauslow of Colfax, N.D., NDSC Chairman, traveled throughout China August 9-19 in an effort to strengthen

existing relationships and to explore new opportunities in the growing market.

"We had the privilege of meeting with some of the largest buyers of soybeans worldwide," says Diana Beitelspacher, CEO. "It is critical to have a relationship with these buyers to not only expand market opportunities for North Dakota soybeans, but to educate them about the excellent quality of our beans," she adds. Northern-grown soybeans are typically lower in crude protein due to weather and a shorter growing season. However, soybeans produced in the upper Midwest deliver a higher level of essential amino acids, providing more efficient nutrition to hogs, poultry and the aquaculture industry. "During our meetings, we were able to inform Chinese buyers about these building blocks of animal nutrition, which we expect will result in

increased market share and higher returns to soybean farmers in this region," adds Beitelspacher.

The NDSC delegation visited Beijing, Harbin, Dalian and Shanghai. The delegation had the opportunity to meet with three of China's largest importers of U.S. soybeans, COFCO, Chinatex and Jiusan Group, in addition to other meetings. China is a key market for North Dakota soybean farmers, and the



North Dakota Soybean Council (NDSC) delegation met with COFCO in its Beijing office on August 12, 2013. COFCO is the third-largest Chinese importer of U.S. soybeans, importing 7 million metric tons per year from the U.S.

🕤 Funded by the North Dakota soybean checkoff.



The North Dakota Soybean Council (NDSC) delegation tours the Jiusan Group port, storage and crushing facilities in Dalian on August 14, 2013. The Jiusan Group is the second-largest Chinese importer of U.S. soybeans, with planned imports of 8 million metric tons in 2013 alone. In 2014, the group anticipates importing 10 million metric tons.

NDSC understands how important it is to take the time to travel to China and meet with importers and to build strong interactions for future trade. "It was apparent in the duration of our trip that the demand for U.S. soybeans will continue to grow as China's population and income see growth every year," says Stephanie Sinner, NDSC Director of Marketing and a member of the delegation. "Importers mentioned that the greatest demand will continue to come from the ever-growing livestock industry in China. They greatly appreciated the opportunity to meet directly with North Dakota farmers to discuss farming, crop quality and appreciation for consistent quality in our soybeans."

The NDSC delegation that traveled to China also included Tyler Speich of Milnor, N.D., NDSC Vice Chairman; Dusty Lodoen of Westhope, N.D., NDSC Treasurer; Art Wosick of Minto, N.D., NDSC Director: Mike Appert of Hazelton, N.D., NDSC Director; Brent Kohls of Mayville, N.D., ND Soybean Growers Association Vice President: Peter Mishek of Mishek, Inc.; and Don Wick, Red River Farm Network Agriculture Iournalist.

Best of the Best in Wheat and Soybean Research and Marketing Workshops

Researchers and Extension Specialists from North Dakota State University and the University of Minnesota are working together to deliver the most current research information to help you make better management decisions on your farm. One of the highlights will be hands-on demonstrations where you get a closer look at important production and marketing tools.

2014 Best of the Best in Wheat and Soybean Research and Marketing workshops will be held Wednesday, February 5th at the Alerus Center in Grand Forks and Thursday, February 6th at the Courtyard by Marriott, Moorhead.

These sessions are free. Pre-registration is encouraged. CEU credits are available.

For times and to register, call (800) 242-6118, ext 3 or go online at www.smallgrains.org and click on Best of the Best link.

These workshops are brought to you by the N.D. Soybean Council, Minn. Association of Wheat Growers, Minn. Wheat Research & Promotion Council, N.D. Grain Growers Association, Minn. Soybean Research & Promotion Council and the N.D. Wheat Commission.

Herbicide-Resistant Weeds Are Lurking Near You!

Using themes from Halloween and Thanksgiving, we have *monsters* lurking in our soybean fields. Thankfully, we have tools to delay the monsters' impact on our crops. This reference is, of course, about herbicide-resistant weeds and their management in North Dakota.

A scary fact is that weed resistance to herbicides cannot be prevented but can be delayed. The currently identified monsters that are resistant to glyphosate include horseweed, common ragweed, waterhemp and kochia. Kochia is our biggest concern across the state because of the weed's abundance and biology; additionally, soybeans are now grown in all corners of the state. Other weeds likely to be added to the glyphosate-resistant list include common lambsquarters and the dreaded Palmer amaranth. Related problems include numerous weed species that are resistant to herbicide groups besides mode-of-action number 9 (glyphosate) and crossresistance (weeds

resistant to multiple mode-of-action groups).

The NDSU Extension Service has many recommendations and tools to help with minimizing and managing herbicideresistant weeds. The information base is the "North Dakota Weed Control Guide." Supplements include the NDSU weeds website (www.ndsu.edu/weeds/), ND herbicide chart, videos, etc.

Until recently, the above-mentioned NDSU tricks have been commonly ignored. This mindset is changing, and management strategies are being adapted. This adjustment is good because the chemical industry does not have any new treats to give us to control resistant weeds.

The key words for resistant-weed management are probably "intensity" and "diversity." We need to intensify our weedcontrol strategies by using multiple mode-ofaction groups for soil and post-emergence application of herbicides that utilize optimal application equipment and methods. **Diversification means** using all available tools (not just herbicides) for weed control, including crop rotation, tillage,

mowing, sanitation (especially field margins), and hand-weeding isolated weeds or small patches. Don't forget to frequently scout your fields throughout the season. These tools require more resources (e.g., money, time, labor and equipment) than used during the past decade of "easy" weed control for soybeans.

Although this article may be written on the lighter side, please be serious about using the advice. You will be thankful in the long run. *Contributed by Greg Endres, NDSU Extension Area Agronomist*



NDSU Schedules 2014 "Getting It Right" Soybean Production Meetings

Soybean producers interested in intensive soybean management should plan to attend one of three "Getting It Right" meetings scheduled for Velva, Mohall and Wishek. At the meetings, North Dakota State University Extension Service faculty and staff will discuss soybean research and 2014 production issues.

"These are soybean educational meetings with current researchbased information that can help producers with soybean production decisions for the 2014 growing season," says Hans Kandel, NDSU Extension Agronomist.

The meeting dates are as follows:

- Tuesday, Jan. 14, 2014: 10 a.m. to 3 p.m. at the Velva Senior Center – Located at 122 Main St. N., Velva, N.D.
- Wednesday, Jan. 15, 2014: 10 a.m. to 3 p.m. at the Mohall Emergency Services Bldg. – Located at 104 Central Ave. N., Mohall, N.D. From the four-way stop on Main St. go North 1 block.
- Tuesday, Jan. 28, 2014:

10 a.m. to 3 p.m. at the Wishek American Legion Post – Located at 819 2nd Av.e N., Wishek, N.D. From Hwy 3, turn east onto Hwy 13. From Hwy 13, turn north at the Dakota Central Frontier Cooperative gas station, and go 1 block.

Sam Markell, NDSU Extension pathologist, will provide an update on the disease outlook for 2014 along with results from field research that was conducted in 2013. Two important topics covered will be an update on soybean cyst nematodes and how to manage soybean diseases. Kandel will provide information on variety selection, the latest information on iron chlorosis prevention, the importance of good nodulation, fertility issues and water management. Greg Endres, NDSU Area **Extension Specialist**, Cropping Systems, will discuss intensive soybean management, no till and strip till versus conventional till, planting dates, plant populations and row spacing, different soybean special inputs on

Why Not Higher Soybean Yields? (compared to corn) -Soybean has ~50 percent higher energy content per Ib of seed and 7% heavier bushels than corn -It has photorespiration, losing up to 1/3rd hotosynthesis to this "usele. bcess

Hans Kandel, NDSU Extension Agronomist, talks with farmers at "Getting it Right" soybean production meetings.

the market, and weed management issues. Janet Knodel, NDSU Extension entomologist, will discuss how to manage spider mites and soybean aphids in Velva and Mohall. NDSU Extension Agents Raquel Dugan-Dibble (Velva), LoAyne Voigt (Mohall), Crystal Schaunaman and Sheldon Gerhardt (Wishek) will be the hosts and will provide local production and crop updates.

The programs and lunches are sponsored by the North Dakota Soybean Council. The programs are free and open to farmers. Preregistration is not necessary.

North Dakota Soybean Council Hosts International Guests in October

North Dakota Soybean Council Host International Crop Sampling Delegation

The North Dakota Soybean Council (NDSC) welcomed and hosted an international soybean crop sampling delegation from China. Indonesia. Vietnam & Thailand on Tuesday, October 1, 2013. During their visit to North Dakota, the overseas guests had the opportunity to tour Maple **River Grain & Agronomy** in Casselton, N.D., and area soybean farms, including: Brent Kohls' Farm in Clifford, N.D.; and Joel Thorsrud's Farm in Hillsboro, N.D.. Some of the visiting delegate members from China met NDSC board and staff members just recently in August when NDSC traveled to China as part of a relationship building trade mission.

"Hosting international trade delegations is instrumental to expanding our footprint in overseas markets," says NDSC CEO Diana Beitelspacher. "It also provides the ideal opportunity to explore ways of creating and expanding demands for U.S. and North Dakota soy overseas," she adds.

"It was a great hands-on



A group photo of the international soybean crop sampling delegation from China, Indonesia, Vietnam & Thailand and representatives from the North Dakota Soybean Council and the North Dakota Soybean Growers Association in Clifford, N.D. on Tuesday, October 1, 2013.

day for our Crop Sampling group as they were able to see North Dakota soybean harvest in action and even ride in the combines with our farmers," says NDSC **Director of Marketing** Stephanie Sinner. "This delegation represented our largest customers for North Dakota soybeans, so it is very important for them to meet our farmers and see the soybean production. It helps them understand how our farming practices work and how these practices



Brent Kohls a soybean farmer from Traill County, discusses the current soybean crop condition and quality for North Dakota this year with the SE Asian guests. Kohls is vice president of the North Dakota Soybean Growers Association.

🕤 🖉 Funded by the **North Dakota** soybean checkoff.



Hillsboro, N.D. soybean farmer, Joel Throsrud (in ball cap), explains North Dakota farm operation costs with the international delegation on October 1, 2013. Thorsrud is a director on the United Soybean Board.

enable our North Dakota soybean farmers to continue to be a trusted supplier of high quality soybeans to each of these markets, year in and year out."

The purpose of the delegation's visit was to build relationships between North Dakota soybean producers and international customers: to educate them about the quality of soybeans grown in North Dakota: and allow them to take samples of North Dakota soybeans to test moisture, protein, oil and essential amino acids. These samples allow the major feed and food buyers for these countries to see

exactly what they are buying; an abundant,

secure, safe, clean and quality product for their families, companies and fellow consumers.

Filipino Delegation Learns More About North Dakota Soybeans

NDSC also welcomed a large team of soybean purchasers from the Philippines to North Dakota October 15, 2013. The purpose of their visit was to also build relationships between North Dakota soybean producers and the Filipino international customers, and to educate them on the quality of North Dakota soybeans and purchasing opportunities for livestock feed. The majority of the delegation

represented Filipino businesses in the animal feed industry.

During their visit to North Dakota. the Filipino delegation's agenda included a presentation and trading exercise with Dr. Bill Wilson in NDSU's **Commodity Trading** Room at Barry Hall in Fargo, N.D.; and tours of Alton Grain Terminal near Hillsboro, N.D. and Unity Seed in Casselton, N.D.. In 2012, the Philippines imported 1.5 million metric tons of soybean meal from the United States. Ninety-five percent of soybeans grown in North Dakota are shipped off the Pacific Northwest destined to SE Asia.



North Dakota Soybean Council board member Harvey Pyle (fourth from the right, back row) hosts the Filipino trade delegation at his family's farm operation, Unity Seed, in Casselton, N.D.

Precision Ag: Farming in the Clouds

"It's complex, but it's easy." That's how Horace, N.D., farmer and North Dakota Soybean Growers Association board member Ryan Richard describes farming with **Precision Planting** equipment. "My thought is you have to place your seed perfectly. If you don't have it planted right, if it's not spaced correctly, you're going to be losing yield." This season is Richard's first year using the Precision Planting equipment, and he is now selling the brand for Premium Ag Solutions.

From real-time kinematic (RTK) satellite navigation-based autosteer systems, to yield monitors, to the iPad, precision-agriculture technologies are at work on the farm. While the



Ryan Richard, NDSGA board member, overlays planting and harvesting information on his iPad.

payoff has been most noticeable for corn, these technologies are also

helping growers make more informed decisions about soybean



Travis Messer, Plains Grain and Agronomy, says the explosion in precision agriculture happened in 2008, after fertilizer prices skyrocketed.

production.

Because the cost of soybean seed has increased, there has been more interest in finetuning production. Richard says that improved accuracy for soybean seed-planting depth is one benefit of using a planter that has precision technology that was developed for corn.

Richard has every seed drop from the spring in his iPad, from his 20/20 SeedSense, and then can overlay a harvest map onto the same iPad that he carries with him. "It's a very easy and accurate way of doing accounting," says Richard. "With FieldView, I have mapping, and the 20/20monitor goes right in the combine. It's accurate within one percent of what I'm actually harvesting."

Matt Carlson, account manager with DuPont Pioneer, says adoption of precision agriculture has definitely increased in the past five to 10 years, partly due to the strong farm economy. Carlson argues that precision agriculture is more important when the ag economy is down because every penny, every margin, is even more valuable.

Plains Grain and Agronomy's (PG & A) Precision Ag Manager and Sales Manager Travis Messer thinks the big

explosion in precision ag happened in 2008 when fertilizer prices went through the roof. "There were a lot of guys involved in precision ag prior to that point, but all of a sudden, we started looking at fertilizer costs north of \$200-\$250 an acre, and growers had a renewed interest in figuring out a way to cut some of those costs." Messer estimates about 85 to 90 percent of what PG & A does is done using variable rate technology.

Knowing the variability in a field allows some growers to plant a variety with a higher potential in certain field zones. Some growers have planted two different varieties in the same field, depending on the soil salinity and the corresponding iron deficiency chlorosis.

The most exciting thing about precision ag right now, according to Messer, is the new planter technology. He says that growers understand how important it is to place seed accurately to get the right depth and the right spacing. PG & A is also a Precision Planting dealer, one of the various companies manufacturing different downforce systems. "There's different things available now to be able to map every seed coming out of that planter, from singulation spacing and down force," says Messer. "All that information is being logged, so we can



Luke James, Ag Leader Technology; Matt Carlson, DuPont Pioneer and Travis Messer, Plains Grain and Agronomy, spoke about precision ag issues at a Big Iron seminar.

take that map at harvest time and look at two screens to see if we had a singulation issue on a field, how that's affecting yield on the screen simultaneously and look at different hybrids that were planted in that field while we're harvesting."

Beau Jacobson, owner of Premium Ag Solutions in Hitterdal, Minn., has the Precision Planting 20/20 precision yield monitor in his combines. "The nice thing about this is it's color blind. You can plant with a red planter, a white planter, whatever



Luke James, Ag Leader Technologies

you want, and then you can combine with a different color and all your information pulls across."

Jacobson says that the **Precision Planting system** allows growers to overlay their planting variety, speed, population, singulation, the ride control of their planter, and the down force being applied to each individual row unit. "So we can overlay that information and page through it in split screen. This information can be used at planting and harvest time. It's also tied wirelessly to the iPad, so I get an email update every hour on each combine telling me what their average speed was, the average yield, the average moisture, how many bushels they've harvested, and then it'll give me a field summary. The combines are communicating back and forth between each other,

overlaying coverage maps and yield maps, and I can see it from a remote location anywhere in the world as long as I've got internet service."

Eventually, Jacobson thinks we'll know what happened to each individual seed, why it happened, and what we need to do different to bring the rest of the seed up to its full potential.

Troy Amundson works in sales and marketing with Premium Ag Solutions and says everything starts with the planter pass. "If there's something that isn't quite perfect with that planter, then from there, we're just building off of a shouldhave-been. We can't build yield. The only place to build it is with that planter."

Luke James, SMS software sales manager for Ag Leader Technology, says the instant savings that farmers are likely to see are the seed and chemicals they're saving. "Or, they're making less passes; they're not overlapping as much, so you get that instant return. The second savings is with the data. Being able to use that information you've gathered for the last year, five years, 10 years, and use it to make management decisions; I think that's where the real opportunity for profitability is at."

Continued on Next Page

Ag Leader recently unveiled AgFiniti, its cloud-based software, allowing file transfer, sending data from the tractor cab to the cloud and into the office. According to James, "File transfer is just the beginning; there's going to be a lot of remote viewing-type tools, map sharing tools. We've also announced some new water-management tools into our Intellislope system, which is our automatic tiling solution."

Among Pioneer's new tools include 360 Notes, a mobile device which can be downloaded on your iPhone, iPad or Android. The program lets you take notes in the field and share them with fellow farm workers, your agronomist or a crop consultant. The Select version lets farmers record weather data. "You can also pull in crop varieties," says Carlson. "A picture I took of my dad's farm in August estimated what day one of his fields would reach maturity based on the weather he had on that field." This tool allows you to monitor growing degree days (GDDs) by field, or rainfall by field, and compare it on a



The iPad has helped revolutionize precision agriculture. Troy Amundson uses his iPad for various precision agriculture practices.



Beau Jacobson, Premium Ag Solutions, describes Precision Planting 20/20 as "color blind."

yearly basis. Pioneer is also working on a yield estimator that is based on rainfall and GDDs.

Messer has utilized WinField Solutions' new R7 tool to get a picture of fields once a week, every week throughout the growing season. "This year, there was a lot of rain early, so there was a lot of nitrogen loss," says Messer. "We were able to grab that in-season image and throw out a variable rate side-dress application map within 24 hours."

If you feel overwhelmed and far behind others who have a head start on this technology, take heart. Carlson thinks the tools will become more precise and a little easier to use. According to industry experts, the place to start is with a trusted advisor or agronomist.

Precision Farming Market Experiencing Rapid Growth

According to a new market research report, the overall global precision farming market will be worth \$3.7 billion by 2018, with a compound annual growth rate of over 13 percent. Published by Markets and Markets, the new research says that precision farming offers increasing yields while, at the same time, reducing waste and environmental degradation. The major drivers of the global precision farming market are profitability and enhancement in yields, government assistance, energy and cost saving, and the growing agro industry. The only restraints are the high initial investments and the lack of technical know-how.

Tenth Annual Golf Tournament

Thank you for making the Tenth Annual 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 the album posted at facebook.com/North Dakota SoybeanGrowers Association

CONGRATULATIONS TO OUR TOURNAMENT WINNERS

First Place: Mural Pollert, Dean Linsteadt, Jeff Williams and Brett Williams

Second Place: Brent Buhr, Dale Nelson, Ryan Toop and Dave Giermann

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

Tenth Place: Chad Kleinknecht, Jeff Romsdal, Todd Sather and Calvin Leyendecker

Closet to Pin #4: Paul Larson Closest to Pin #11: Jeremy Sinner

Longest Putt #6: Tim Wilcox Long Drive #16: Tyler Bjerke Closest Second Shot #10: Bob Green

THANK YOU, GOLF TOURNAMENT SPONSORS

HOLE SPONSORS: AgCountry Farm Credit Services; Bremer Bank; Bremer Insurance; Doug Goehring, N.D. Agriculture Commissioner; Eide Bailly; Hebron Landscaping; Farm & Ranch Guide; Minnesota Soybean; Mustang Seeds; National Biodiesel Board; N.D. Corn Growers Association; Northern Crops Institute; NorthStar Genetics; Prairie Brand Seeds; Proseed; SB & B Foods; SK Food International; S.D. Soybean Research and Promotion Council; Syngenta and Travel Travel

BEVERAGE CART: Novozymes BioAg PLAYER CARTS: Proseed LUNCH: BNSF Railway DINNER: N.D. Soybean Council HOLE-IN-ONE: Mustang Seeds GOLF BALLS: Authority Herbicides from FMC Ag Products GOLF TOWELS: Novozymes BioAg T-SHIRTS: Asgrow WELCOME BAG: BASF The Chemical Co. GENERAL: American Federal Bank, Bell State Bank and Trust, DuPont Pioneer, Pride of Dakota, Red River Farm Network and Valley Crop Insurance



Spatial Competition, Arbitrage and Risk in U.S. Soybeans

Many challenges confront commodity trading, including where to buy and sell, and how to manage the logistics of the transaction. Soybean markets have seen changes in basis, futures, and volatility for all transport modes. In addition, there is intense intermarket competition, notably for shipments to the U.S. Gulf (USG) and Pacific Northwest (PNW). There have also been shifts in production, including more soybeans being produced in the Northern Midwest. China's demand for soybeans has been growing rapidly and is drawing more soybeans from the PNW. Increased Asian demand has created congestion at ports, but expansion at the PNW has mitigated these constraints. These issues have motivated research to more fully understand the relationship between spatial arbitrage and marketing for northern soybean states. Spatial arbitrage occurs when the price for the destination and origin market values differs more than transfer costs. The purpose of this study is to analyze intermarket competition in soybeans within the United States. Specifically, an empirical model of spatial arbitrage is specified and evaluated using stochastic optimization techniques.

Spatial boundaries have



shifted for the soybean market, and there have been increased exports from the PNW. Spatialarbitrage opportunities exist due to shifts in market boundaries. The model developed in this study is a portfolio of origins that maximizes the profits with limited risk. From repetitive optimization, the results show which origins have the potential for the greatest spatial-arbitrage profits and the frequency in which spatial-arbitrage opportunity arises.

Boundary lines among origins change in response to numerous variables. The results of this study indicate that locations having the largest average spatialarbitrage profits have less domestic demand and are located close to market boundaries. Iowa origins have the smallest spatialarbitrage profits, which are probably due to the proximity to domestic soybean crushing plants.

Northern soybean regions ship a majority of the soybeans to the PNW. These are illustrated in the map (Figure 1). Most origins in Nebraska are indifferent about which destination to ship soybeans (Figure 2).

Alton, N.D., has spatial arbitrage occurring 60 percent of the time, and the remainder of the time, spatial-arbitrage profits were nil. For Alton, N.D., the frequency of spatial arbitrage occurring with the PNW port is 56 percent of the time and at the USG is 4 percent of the time.

Sensitivities were conducted to test the effects of vertical integration on spatialarbitrage profits. A vertically integrated firm that includes owning shuttle loaders, ports, and the ability to ship soybeans internationally was also estimated. Going from non-vertically integrated to buying soybeans and shipping internationally creates a \$.25/bu increase in the

average spatial-arbitrage profits. Therefore, these results indicate that becoming more vertically integrated results in greater profits and greater risks.

There are several important implications of the results, particularly for northern soybean regions. First, origins in North Dakota are highly dependent on the PNW as a destination market. In this case, there is limited local processing demand, and they are closer to the PNW which has been an important growth market. Second, arbitrage profits vary regionally. Iowa and Minnesota origins have spatialarbitrage opportunities with less frequency than others. North Dakota. South Dakota and Nebraska all have average or above average spatialarbitrage profits. Third, returns in the base case are greater versus all the more vertically integrated strategies. These are important and largely explain why firms have an interest in developing interior shuttle origins. Even though the more integrated strategies are profitable, they all involve greater risks.

Contributed by Dr. Bill Wilson, University Distinguished Professor, Department of Agribusiness, NDSU



CSX Rated as Top-Performing Railroad Among Grain Shippers

For the first time, CSX Transportation was selected as the topperforming railroad by leading U.S. agricultural shippers in the fourth annual Soy **Transportation Coalition** (STC) Railroad Report Card. Union Pacific Railroad, the top-ranking railroad in 2011 and 2012, finished in second place. Norfolk Southern Railway climbed to third place from its fourth place ranking in 2012. Survey respondents ranked

Canadian Pacific in last place for the third year in a row.

The survey was completed anonymously by agricultural shippers of various sizes and operation scales; and the survey has been comprised of the same 11 questions since the report card's inception. The questions are categorized as follows: 1. On-Time Performance, 2. Customer Service and 3. Costs. For most questions, participants were asked to rate each of the seven Class I railroads on a scale from 1-10 with 10 being the highest and 1 being the lowest. The 2013 survey had the largest number of participants in the report card's history.

After combining the results from the 11 survey questions, CSX received the highest overall rating. The company ranked first in six of the 11 questions. Overall, railroads received, on average, a 2.5 percent higher score than in 2012. Canadian Pacific, rated as the lowestperforming railroad, received a last place ranking on four of the 11 questions.

Soy Transportation Coalition Rail-Customer Satisfaction Index: Overall Ratings

- 1. CSX Transportation
- 2. Union Pacific Railroad
- 3. Norfolk Southern Railway
- 4. Burlington Northern Santa Fe Railway
- 5. Canadian National Railway
- 6. Kansas City Southern Railway
- 7. Canadian Pacific Railway

"North Dakota soybean farmers - arguably more than in any other state - are dependent upon a quality, accessible rail network in order to be profitable," says Scott Gauslow, a soybean farmer from Colfax, N.D.; he is the chairman of the North Dakota Soybean Council and vice chairman of the Soy Transportation Coalition. "First of all. due to an absence of in-state processing, what we grow, we ship. Secondly, unlike many other states, we do not have access to barge transportation due to our



At NDSU's Bison Harvest Bowl football game November 9th, the North Dakota Soybean Council (NDSC) joined tailgaters at the Fargodome and promoted North Dakota soybeans and celebrated agriculture and farmers in conjunction with Harvest Bowl. NDSC handed out free soy chocolate chip cookie bars, soy recipes and brochures, stickers, coloring books and soy coloring crayons. Those tailgaters who participated in fun soybean trivia received a free cooler snack bag. distance from inland waterways. As a result, our freight railroads are the one and only option for getting our soybeans to market. I am, therefore, encouraged that the Sov Transportation Coalition's Railroad Report Card reveals an industry that appears to be improving. We applaud this progress and look forward to continuing to work with our nation's freight railroads to ensure the needs of North Dakota soybean farmers are addressed."

Railroads, on average, achieved significantly higher ratings in 2013 for their ability to provide quality customer service and to resolve problems to the customers' satisfaction. Agricultural shippers rated railroads noticeably lower in providing adequate notification when price increases occur.

Class I railroads are the largest railroads in the country and have an annual operating revenue exceeding \$378 million. Railroads classified as Class I include: Burlington Northern Santa Fe Railway (BNSF), CSX Transportation, Kansas City Southern Railway, Norfolk Southern Railway and Union Pacific Railroad. Canadian National Railway and Canadian Pacific Railway are also considered Class I railroads due to their significant track lines in the United States. Each year, over 900 million bushels (27.5 million tons) of U.S. soybeans are transported by rail. By the year 2020/2021, the volume moved by rail is estimated to increase to 1.4 billion bushels (42 million tons). The full results of the survey, including a copy of the questionnaire, can be accessed at www. soytransportation.org.

MARK YOUR CALENDARS 2014 Northern Soybean Expo

February 18, 2014 • Fargo Holiday Inn

The 2014 Northern Soybean Expo is scheduled for February 18, 2014, at the Fargo Holiday Inn. Special guest speakers include Peter Zeihan, Drew Lerner and John Phipps.



PETER ZEIHAN: An internationally known economist, geopolitical strategist and forecaster, Peter Zeihan combines topography, economics, demographics, history and culture to craft the future.



DREW LERNER: As President and Senior Agricultural Meteorologist of World Weather, Inc., Drew Lerner has been forecasting international weather for 31 years. He supports the agricultural industry by providing detailed short- and long-range weather predictions for each major crop area in the world.



JOHN PHIPPS: John is the managing editor and television host of "US Farm Report." He will share strategies to not only endure, but also to prosper from an unpredictable future in agriculture by understanding which risks are worth the worry.

The Weird World of Natto: Part 1

SIXTY PERCENT OF THE WORLD'S NATTO INDUSTRY IS LOCATED IN THE RED RIVER VALLEY

What in the World is Natto?

Natto is a traditional Japanese food that is made with fermented soybeans. Commonly served over rice, the fare has a pungent taste, distinctive odor and interesting texture that make it both loved and avoided across the country. The Japanese consume approximately 125,000 metric tons of Natto annually, over 80 percent of which comes from U.S. soy. Believe it or not, the dish is popular for breakfast, especially with older Japanese people. This dish has been called the breakfast of champions by locals, but it contains no flakes and doesn't have a picture of a professional athlete on the box. Natto is to Japan what yogurt is to the American consumer. Natto is not the name or variety of a soybean, but actually the name of a food.

The earliest origins of Natto are undefined and vary. According to Rick Brandenburger of the Northern Food Grade Soybean Association, Natto may have been discovered by Japanese



Samurai warriors during a war between China and Japan. It was thought that Japanese Samurai warriors discovered soybeans in China during battle time and would pack soybeans in baskets made from rice straw for their horseback ride home. As the warriors journeyed back to Japan on horseback, the heat, rain, horse sweat and enzymes in the rice straw baskets would ferment the soybeans into "Natto". Along their journey, the

warriors discovered that the fermented soybeans (Natto) were still good enough to consume, but the food had a unique taste. Today, Natto is commercialized, manufactured and found on the shelves of Japanese grocery stores.

Natto cannot be grown just anywhere. The Red River Valley (RRV) is ideal to produce the specialty soybeans used to make Natto. Just 20 years ago, the RRV produced less than 20 percent of the soybeans used by the Natto industry, but today, the region raises 60 percent of the beans for the Natto industry. In fact, according to Bob Sinner of the Northern Food Grade Soybean Association, the RRV region grows the highestquality specialty soybeans used for Natto, and the RRV continues to expand as a supplier of specialty soybeans for the Natto market.

There are two types of specialty soybeans grown to produce Natto: Gokusyou and Syouryo. Gokusyou is a smaller seed type which is more popular in Japan because it is similar in size to rice. Natto may be an acquired taste because of its powerful smell, strong flavor and slimy texture. In fact, according to Sinner, Americans find the smell of Natto offensive, and he compares the smell to soybeans at the bottom of a grain elevator pit. The older Japanese population enjoys the sticky, cold food daily, and Natto is known to be extremely healthy. While the older generation in Japan decreases in numbers,

Funded by the **North Dakota** soybean checkoff.



the younger generation acquires the taste. Therefore, the Japanese Natto market is quite stable.

The Northern Food Grade Soybean Association (NFGSA) presents an annual, highly prestigious award to one Japanese company that utilizes and supports the specialty soybeans grown in North Dakota. This award is highly sought after in Japan and is respected among the Japanese Natto industry. The Northern Food Grade Soybean Association is a regional group of producers, processors and marketers of foodgrade soybeans, and it was established to support and promote the food soybean industry. The NFGSA works to ensure that the region's producers and industry members maintain their positive reputation for providing the world's highest-quality foodgrade soybeans. For more information, log on to www.nfgsa.org.

NDSC Congratulates Scholarship Recipients

Annually the North Dakota Soybean Council (NDSC) sponsors two Crop Science Scholarships for undergraduates and two Graduate Student Scholarships at NDSU. This year Benjamin Cigelske of Hatton, N.D. (second from left) and Jeremy Sauer of Long Prairie, M.N. (not pictured) were awarded NDSC's Crop Science Scholarships; and Chandra Heglund of Bismarck, N.D. (second from right) and Ashton Walter of Walcott, N.D. (far left) were awarded NDSC's Graduate Student Scholarships. NDSC Communications Director Suzanne Wolf (far right) congratulated NDSC's scholarship recipients at NDSU's Scholarship Recognition Luncheon November 7th.



What do Non-Ag Audiences Want to Learn from North Dakota Farmers and Ranchers?

The CommonGround North Dakota movement is working to provide answers to questions and learn from the questions non-ag consumers are asking. This fall, CommonGround N. D. has answered questions about hormones and antibiotics in meat, gluten concerns, pesticide use on farms, GMO's, organic, non-organic and what food is considered local.

While North Dakota's roots started in agriculture and the long-standing largest industry has been agriculture, the energy boom has brought an influx of new population to the state. In addition, North Dakota has more urban counties now across the state that are removed from farming life. The average American family is now at least three generations removed from the farm. Agriculture cannot afford to ignore this disconnect to how food is grown and needs to connect to build relationships and change conversations for positive connections about agriculture.



The sorority sisters of NDSU's Sigma Alpha hosted a Corn Maze event on the NDSU campus on October 26, 2013 for families. Kids and parents were able to participate in hands-on activities, including the corn maze, coloring and fun trivia on food and farming.

In late September, CommonGround N.D. volunteers Karolyn Zurn and Katie Pinke attended the Women's Health Conference in Bismarck. Ahead of the event, CommonGround N.D. had an electronic billboard advertising their booth at the most trafficked area in Bismarck. Katie and Karolyn spoke with hundreds of women at the event that visited the CommonGround N.D. booth, answering farming and food questions and dispelling myths about food. What they learned is that they have more work to do and a greater opportunity to connect with non-ag consumers in North Dakota's own backvard. The movement is building trust with North Dakotans to ask farmers about questions they have and to understand where their food comes from on the grocery store shelf.

CommonGround North Dakota's effort includes events like the Women's Health Conference and a Corn Maze for kids during the weekend of October 26th at NDSU in Fargo. CommonGround N.D. also coordinates and builds online relationships using social media channels. A majority of Americans are on Facebook, which is where they are receiving their news. It is important that this movement builds community in social media and shares key messages.

CommonGround North Dakota's blog is going to start with five farmers and ranchers as contributors, all women from across North Dakota, who have current, established farm blogs. A next step for CommonGround N.D. will be hosting social media training for additional volunteers this winter to engage more in the online outreach and effort. CommonGround N.D. is utilizing traditional local media as well and advertising in spaces that target foodpurchasing women in North Dakota with advertising and written articles.

An example of traditional media outreach came on October 30, 2013 when Katie Pinke shared about CommonGround N.D. on the Noon Show with Marci Narum on KX News in Bismarck. For five minutes Katie and

Marci talked about how and why CommonGround got started, the food we can buy at our local grocery store that is produced by North Dakota farmers and ranchers, and how to stay connected with CommonGround's effort. By building relationships online and offline, the movement is connecting to build relationships with non-ag audiences and helping to know and trust North Dakota farmers and the food they produce.

Contributed by Katie Pinke, CommonGround N.D. volunteer. Learn more about Common-Ground N.D. at www. facebook.com/Common-GroundNorthDakotaND volunteer



Commonround N.D. volunteers Katie Pinke and Karolyn Zurn chat with Mrs. Mikey Hoeven at Women's Health Conference in Bismarck September 30, 2013



CommonGround N.D. volunteer Katie Pinke talks with Marci Narum on the Noon Show on KX News in Bismarck October 30th.



Happy, Healthy and Delicious Holidays with Soy

When the holidays roll around, so do parties and social get-togethers along with many other opportunities to indulge in tasty treats. By the time Santa comes down the chimney, your sweettooth cravings might just be getting started. Why not stuff a little soy into your stocking (and diet) and give the gift of health this holiday season? Soyfoods have numerous benefits, including heart-healthy protein, fiber and isoflavones. They are versatile in taste and texture, and they can be found throughout grocery stores.

For more information

on soyfoods or for free recipes, contact the North Dakota Soybean Council. Phone: (888) 469-6409 Email: swolf@ ndsoybean.org



No-Bake Soynut Butter Pie

cup chocolate soynut butter
 deep-dish graham-cracker crust
 ounces soy cream cheese
 ounces dairy cream cheese

1 cup confectioners' sugar, sifted
 1 cup crunchy soynut butter
 ¹/₂ cup milk
 8 ounces frozen whipped topping, thawed

In a microwavable bowl (on high power), microwave the chocolate soynut butter for approximately one minute or until it is pourable. Spread the chocolate soynut butter over the graham-cracker crust. Set aside.

In a large mixing bowl, combine the soy cream cheese, dairy cream cheese and confectioners' sugar; mix well. Add soynut butter and mix. Slowly add milk and continue to mix. Fold in whipped topping. Pour in the pie shell and cover with the lid provided with the graham-cracker crust. Freeze for at least 30 minutes before serving. ****Note:** This pie freezes well for several days.

Serving Suggestions: The pie can be served right from the freezer for a more cheesecake consistency or can be left out for 15-30 minutes for a lighter, fluffier consistency. *The photo and recipe are courtesy of The Soyfoods Council.*



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GOVERNMENT REOPENS

On October 16, President Barack Obama signed a bill passed by both the House and Senate to reopen the government until Jan. 15, and to raise the debt ceiling until Feb. 7. The bills, each of which passed its respective chamber with Democratic and Republican votes, ensure that federal services, including those provided by USDA, will come on line.

SHUTDOWN IMPACT

The government shutdown and the expiration of the farm bill both came at the same time. American Soybean Association (ASA) President Danny Murphy said this combination will hurt American agriculture. "There are some immediate affects from the farm bill expiration," said Murphy. "No more CRP signup; even now that the government is back to work, there'll be no CRP signup. There's no EQIP money, no conservation payments, or no conservation activity of any kind." Murphy says the Foreign Market Development and Market Access Program funds, which are the market development funds that are really important to soybeans, will expire. "Nearly 60 percent of our crop is exported, and that will have an immediate effect on some of our offices overseas," said Murphy.

CROP INSURANCE, FOOD AID PLEAS

Along with other major farm groups, ASA wrote a letter to House leadership asking representatives to oppose any provisions in the farm bill conference that would impose adjusted gross income (AGI) means testing for the federal crop insurance program. In the letter, the groups noted the critical role that crop insurance plays in the survival of farms and ranches, and asked House leadership and the House conferees to oppose resolutions that undermine strong crop insurance protection.

As part of a coalition with trade, nonprofit and agriculture groups, ASA joined a letter to lawmakers that urged for the protection of America's in-kind food aid program in upcoming conference negotiations on the farm bill. ASA consistently opposed the White House's plan to replace a portion of foreign food aid with cash.



ASA CHEERS OVERWHELMING HOUSE PASSAGE OF WRRDA, URGES TIMELY CONFERENCE AND ENACTMENT

In a vote of 417 to 3, the House of Representatives has passed the Water Resources Reform and Development Act (WRRDA). The American Soybean Association (ASA) supports the bill, and congratulated the House Transportation and Infrastructure Committee leadership following the bill's passage.

"ASA welcomes the passage of the WRRDA bill and commends Chairman Shuster and Ranking member Rahall, as well as Subcommittee Chairman Gibbs and Ranking Member Bishop, for their persistence and support in the process of addressing our waterways infrastructure," said ASA President Danny Murphy, a soybean farmer from Canton, Miss. "As the vote illustrates, this bill enjoys broad bipartisan support in the House, as it does in the Senate and within the administration. With that in mind, we call on the House and the Senate to convene the conference committee as soon as possible so that a final bill can be passed and sent to President Obama before the end of this year."

The WRRDA bill includes provisions to streamline environmental reviews; establish hard deadlines and cost caps on project studies; allow non-federal interests to contribute funds to expedite project components; storage tank thresholds below which agricultural operations would be excluded from the U.S. EPA's Spill Prevention, Control and Countermeasure Rule (SPCC).

MORE BIODIESEL

According to a report from research and consulting firm GlobalData, the U.S. biodiesel industry will produce more than the 1.28 billion-gallon target set under the Renewable Fuels Standard (RFS) for this year.

According to GlobalData, biodiesel is the first Environmental Protection Agency (EPA)-designated "advanced biofuel" — a category that lists alternative fuels possessing at least 50 percent fewer emissions than gasoline — to reach 1 billion gallons of annual production. This growth in U.S. biodiesel production is driven, in large part, by a \$1-per-gallon production tax credit extended through the end of 2013 by the U.S. Congress.

AUTHORITY MAXX

FMC Corporation has added Authority Maxx to its Authority line of herbicides. Authority Maxx, which received EPA registration in September, offers soybean growers concentrated, scalable broadleaf control with a focus on species that glyphosate can leave behind. Authority Maxx is a pre-mix of two herbicides with different modes of action.

annually increase the amount of funding that is provided from the Harbor Maintenance Trust Fund (HMTF) for port maintenance and dredging; and free up money and increase the capacity of the Inland Waterways Trust Fund (IWTF) and requiring the Corps to study and report on bonding, user fees, and other potential funding sources.

The Senate version of the bill includes an amendment, supported by ASA, that would exempt small farms that store oil in aboveground tanks from federal oil-spill regulations. The amendment would set



Scott Gauslow, chairman of the North Dakota Soybean Council, stopped by the NDSGA booth to chat with Jason Mewes, NDSGA president; Nancy Johnson, executive director; and Harvey Morken, NDSGA membership chairman.

Agricultural Land Values Are Not Based on Market Value

A common question North Dakota State University Extension Farm Management Specialist Dwight Aakre gets is as follows: "How much are my property taxes going to go up now that that auction sale down the road went so high?" There's a two-part answer, says Aakre. "One is that that sale has nothing to do with the value that we calculate here because it's not market value. It's the value of the production that determines farmland valuation."

The other factor is the assumption that, because land values go up, then property taxes increase. "That's a reasonable assumption," says Aakre. "But it doesn't have to be that way. The government entities start with a budget and determine how much money they need; then, once they determine all the property values in the jurisdiction, then they figure out what the mill rate is."

According to Aakre, if government entities (counties) don't need any more money than last year and if land and other property values go up, the counties can lower the mill rate.

Calculating the capitalized average annual gross return, which is performed prior to December 1 each year by the Department of Agribusiness and Applied Economics at NDSU, takes a number of factors into consideration, including production (acres X yield X price), input costs and interest rates. This calculation results in an average agricultural value per acre of cropland, non-cropland and inundated agricultural land for each county. NDSU calculates the average values per acre and provides that information to the Tax Department, which then certifies and distributes these values to the 53 counties at the end of each

year. The counties use these average values when setting their agricultural land values for assessment and taxation purposes.

Aakre says NDSU's responsibility is to calculate an average per-acre value for cropland and noncropland. "Then, it's up to the county and township officials to take a look at every quarter and adjust it (value) upward or downward depending on quality and qualifiers," says Aakre. "And then, when it's all said and done, the State Board of Equalization holds the county to within 90 percent of the total acres

Tax Dollars at Work

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CITY & CITY

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OTHER 1%

multiplied times our values in that county." NDSU considers three main factors that are integral to the calculation

of agricultural land values. These factors are production data, the cost of production index and the capitalization rate. The capitalization rate is the single rate applied to both cropland and noncropland, and it's the same for every county. The cost of production index works the same way, according to Aakre. "The same value is applied to every county, so that, too, as the cost of production index changes, values will change by that same percentage for every

county."

When you get to the revenue, that's where you get differences in counties. Aakre explains, "The crop revenue changes because of a changing mix of crops; yields are different every year; prices are different every year; government payments and CRP payments are also factors. All of those change the crop revenue from county to county and from year to year."

Therefore, the higher production in recent years has contributed to increasing land values. "We use a 10-year average with the high and low years dropped," says Aakre. "The first four or five years of that 10-year average are much less in terms of the gross revenue produced than it is in the last four or five years. That's a factor I think a lot of producers are a little bit reluctant to admit, but their revenues have gone up, and this whole process is based on the revenue produced by the land."

Like with the production data, the cost of production index is calculated using the most recent 10 years. A higher cost of production index contributes to lower values. In the case of 2012 agricultural values, the cost of production index increased from 1.39 in 2011 to 1.47 in 2012, reducing agricultural land values by 5.4 percent across all counties. Since the cost of production



The value of the production determines farmland valuation, explains Dwight Aakre, NDSU Extension.

index was put in place in 1999, Aakre says it has gone up every year. "The impact today is about 35 to 40 percent lower land values today than would be calculated if that cost of production index wasn't in there."

The capitalization rate is based on a 10-year average of mortgage rates on North Dakota farmland loans determined by the Agribank mortgage rate of interest for North Dakota. Prior to 2012, rather than relying on a calculated capitalization rate, the law provided for a capitalization rate minimum that started at 9.5 percent in 2004 and ratcheted down to 7.4 percent in 2011. This statutory capitalization rate floor resulted in an artificially higher rate than the calculated capitalization rate in effect, once again, for 2012.

In 2003, the North Dakota Legislature implemented a minimum capitalization rate and the capitalization rate that was calculated based on the Olympic average of 12 years of interest. If that value was below the minimum the legislature set, then the minimum was used. "We did that for 2003 through 2011," says Aakre. "The legislature in 2009 set the minimum at 7.7 percent for 2010 and 7.4 percent for 2011, and then let it sunset."

A lower capitalization rate raises land values. In the case of 2012 agricultural land values, the capitalization rate decreased from the statutory minimum of 7.4 percent in 2011 to the calculated capitalization rate of 5.864 percent in 2012. This rate accounted for 26 percent of the 29 percent increase in agricultural land values across all counties.

According to Aakre, the current changes are not as drastic. "It was that one year with a huge change, and that was totally due to legislative action that resulted in that big increase in land values in 2012."

Looking ahead for 2014, Aakre says the capitalization rate is going to fall again. "I'm guessing it's going to be about 5.25 versus 5.48 a year ago," says Aakre. "So, that'll push values up about 4 or 5 percent. The cost of production index, I'm certain, is going to be up enough to offset that. And then we bring in the 2012 production, which is going to be a record year for most counties which will push out a low year, so values are going to go up in 2014, primarily due to increased revenues at the farm level."

As for where property taxes go, Aakre explains that a portion goes for county government and that the big portion in most taxing districts goes to the school district; then, the township and other things, such as Garrison Diversion, fire departments, etc., receive part. "It's important to note," says Aakre, "that the money that is paid by landowners and the money that is paid by homeowners and commercial businesses is all the same. It all comes into the county government and is divided into those different needs." Those needs vary by county.

The Importance of Variety Selection

BY JERAD LIEDBERG, TERRITORY AGRONOMIST, ASGROW DEKALB

s farmers, sometimes we would like to give ourselves more credit for being in control of a lot of things when it comes to making a crop. But as most of you know, Mother Nature seems to determine a lot of things for us. What kind of weather will we have throughout the summer? How much rain will we have? When will we get into the field in the spring? What will harvesting conditions be like? All of these are very important questions that in the end can make or break the growing season.

So, we have to control the things that we can control- fertility, weed control, tillage practices, and last but not leastvariety selection. Soybean variety selection is the most important decision that a grower will make in regard to achieving high soybean yields. Some of the key selection elements to consider in variety selection (in order of importance) include yield potential, defensive characteristics, relative maturity, plant height, and standability

Yield Potential --Varieties should maintain high yield potential and stable performance across multiple locations in the growing region. When possible, use multi-year data summaries to aid in variety selection. In challenging growing environments, remember that yield stability might be just as important as yield potential. It may be hard for some varieties to "win" a plot, but if they have a good track record of performance and are consistently in the top third of plot results in a wide range of environments, that variety might be the one that you're looking for.

Defensive Characteristics -- Producers always have to be aware of the production issues that may be a problem for them. Iron Deficency Chlorosis (IDC), phytophthora, Soybean Cyst Nematode (SCN) are just a few issues that producers may come across. There are really no "rescue treatments" for these

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problems, so growers have to be aware in the varietal selection process if they need to choose varieties that contain these genes or traits to help manage these problems.

Relative Maturity -- Full season varieties will normally have the most genetic yield potential. However, it is important to remember that rain in August is a pretty important component in the yield making process. Maybe this year your "early" beans out-yielded your " late" ones. That doesn't mean that will be the same story for the next year. Stress can lower vield potential in soybeans, especially if the stress occurs during specific growth stages. It is recommended that you plant a range of soybean maturities that are adapted to your geography, and help reduce the risk of potential yield loss by spreading out flowering, seed fill and physiological maturity. Staggering soybean maturities can also maximize yield potential by spreading out the harvest work load.

Plant Height &

Standability -- For fields with high fertility, a short or moderate plant height with good standability can help minimize lodging concerns. White mold can also be an issue in these environments and normally more mediumstatured beans will stand a little better. When planting in less fertile soils, or "heavy ground", soybeans can struggle a little more to get a decent height. Taller plant types often set pods a bit higher, which allow for greater harvest efficiency.

Lastly, yield potential certainly is improving rapidly every year and annual product turnover is necessary to capture these gains. It is important to always consider, or at least take a look at new products that may have a good fit on your farm. While we may grow comfortable with a particular variety over a few years, now, more than ever, soybean breeders are working on better varieties with the characteristics we will need in the future.





Tell us about your

farm. We raise sugarbeets primarily. We also raise corn, soybeans, edible beans and spring wheat.

Why are you part of the North Dakota Soybean **Growers Association** board? I want to help be a voice for farmers in North Dakota. With the legislative issues and issues, in general, facing agriculture today, the best way to do more is to get involved and be a voice for agriculture. If you're just sitting by and letting others make up the stories, then that's the story everybody's going to listen to. So, I thought the best way for me was to get involved to where I'm able to make a larger impact and leave a bigger footprint for future farmers.

What other organizations have you been active in? In 2012, my wife, Lisa, and I were selected to represent North Dakota in the American Soybean Association DuPont **Pioneer Young Leader** program. I'm on a few different committees for American Crystal on the Growers Association side of things. I'm a member of the Voss piling site truck-haul committee and secretary for the East Grand Forks Growers Association. I'm past president of the board of directors of Farmers Union Oil in Minto and former treasurer of the **Polish National Alliance** in Warsaw, N.D. I'm chairman of the board of supervisors of Harriston Township, former president of the Minto Jaycees, Master Mason with the Masonic Lodge at Larimore and selected by American Crystal to be part of their shareholder development session in 2012.

Why are soybeans part of your crop mix? Soybeans are a good fit in

our rotation. The availability of GMO soybeans, the weed control and the advances that have been made in the newer varieties for the northern growing area have made soybeans a more profitable crop. And, they're fairly easy to grow.

If you could add any new equipment or technology to your farm, what would it be? I'd really like to get new trucks. We have 22 trucks.

Two of them are brand new Peterbuilts, and they are far superior to our old ones. Generally, we have all new machinery and utilize all the technology that's out there. We use precision farming in every way we can. I'd like to be able to share maps between multiple alike machines in a field. Right now, you only see the yield map for what combine vou're in. I'd like to be able to see what the other machines are doing, too.

What's the one piece of technology or farm equipment you'd never want to be without? I couldn't be without the internet. We use the internet for everything from downloading satellite imagery, emailing soil-sample information, transferring precision mapping for variable-rate mapping or spreading, purchasing general farm supplies and watching the markets. When we don't have it, it's really hard. The internet is followed real close by our labor crew. I look at our labor crew as technology because there's 20, 30 and 40 years of knowledge that no computer can replicate. And, without good help, you're not going to get anything done.

What changes do you expect to see on your farm in the next five to

10 years? I expect to see a lot more technology, resulting in a much harder time finding qualified labor. They'll have to be skilled enough to do general farm work, but also to run the hightechnology devices and equipment that are out there. The equipment companies have the idea that adding technology is good, but what they're doing is making so many of the unskilled or limited-skilled laborers obsolete. Finding qualified, skilled labor in the future is going to be hard.

Hobbies? What do you do for fun? I enjoy family time. I like to go to my kids' activities, hockey games or dance recitals. We try to go to the lake in the summer and go boating or fishing.

What's your favorite meal/food? Anything my wife makes. She's an excellent cook.

Any vacation plans on the schedule? We're planning to attend Commodity Classic in San Antonio this year. WinField has invited us to join them in Hawaii. We'll try to get a family vacation someplace warm early next year.

What's the best part of farming? The best part is the opportunity to be my own boss, and spend time with my dad and live the family life.



Tell us about your farm.

I am part of the fourth generation. I married a McIntyre, and it was McIntyre Farms. My father-in-law was Don McIntyre. The first generation to buy this place was one of the great grandparents by the name of Nesemeier, and a Nesemeier married a McIntyre, and that's how we got here. Now, I married a McIntyre, and it's become McIntyre-Pyle. I started farming here in 1972.

Why are you a part of the North Dakota Soybean Council? I was called by a friend of mine by the name of Harvey Morken. I knew who the (North Dakota Soybean) Growers were, and I knew what the Council was, but beyond that, I didn't know an awful lot, and Harvey asked if I'd do this. I had just gotten off a different board the previous year, so I said yes.

Soybeans aren't new to you though. No, we've been growing soybeans here since the very early 1970s, back when we only had maybe 40 or 50 acres of beans for seed production. There weren't that many beans around; it was hard to sell that many bushels. They were a scarce commodity.

What other organizations have you been active in? The one I had the most activity in was the Golden Growers Cooperative board. I got on that in 1995 or 1996, and was on it for 15 years. The last two years I was the chairman. I was part of a group of processors that started Gold Country Seed back in 1989-1990. I was on the board. and I chaired that for quite a few years until we sold that company to Monsanto. McIntyre-Pyle started in 1976 as our seed company, and then, we joined forces with Sinner Seed Farm here in Casselton in 1990 and created Unity Seed. The Sinners have since gone out of the business, so we ended up owning all of Unity Seed. Soybeans and corn are our two main ingredients.

If you could add any new equipment or technology to the farm, what would it be? I don't know that there's new equipment that I'd add to the farm. We have a couple guys working here that are really good at the GPS, the soil mapping and variable-rate application technology. I'm sure there are pieces of equipment they'd tell me they want, but as of now, I make sure they get what they need.

What's one piece of equipment or technology vou wouldn't want to do without? I think the whole GPS/autosteer thing. I remember back when we first got radios. It was like a godsend. Well now, GPS with autosteer and all that stuff, you wouldn't want to do without it anymore. Much less stress, much less work in trying to do a good job of everything you do - planting, cultivating, harvesting - it's all so much nicer that way.

What changes do you expect to see in the next five to 10 years? I think you're already starting to see a lot of the changes. Even 10 years ago, I would never have thought about tile drainage, but now I own a tiling machine, and I'm doing a little bit of tiling each year on the farm. Even here in this flat valley, I think, more and more, these guys are going to put tile in to get more uniformity in their crop and better production out of their acres. The first field we did about five years ago had real bad alkali spots in it. It's taken several years for those spots to start growing, but now they've gotten back to having close to normal production out of them instead of nothing.

Hobbies? What do you do for fun? I have been an avid clay-target shooter since 1972. Most of the shooting I do is skeet. I have gone to the World Shoot in Texas a couple of times, and I hope to next year. The last time I was there, I got to shoot with four people from South Africa.

What's your favorite meal or food? My wife's a good cook, and just about everything she does, I like. Probably the most common thing that I'm easiest to satisfy with is a simple hotdish.

Any vacation plans on the schedule? My wife and I are national parks people. If I was to just go where I wanted to go, I'd be out in the Rocky Mountains, or I'd be in Utah. The parks are gorgeous.

What's the best part of farming? Why did you get into this business? My father-in-law gave me a great opportunity to get into it. That never would have happened any other way. When I watched my uncle pay for two John Deere 105 combines, I was sure I never wanted to farm. What I liked about it was that every day was something new. There were no factory-type routines. It's the same thing as what is the scariest part of farming: every day is new, and you don't know what's coming.

Big Iron iPad Winner

Thanks to everyone who stopped by the North Dakota Soybean Growers Association booth at Big Iron to become a member or to renew their membership. It's always great to meet members. This year, new and renewing members were included in a drawing for an iPad. Congratulations to drawing winner Todd Zahnow, a new member from Raub, N.D. Thanks to Butler for sponsoring the membershipincentive drawing.



Todd Zahnow, Raub, won the membership drawing at Big Iron.



There has been something for everyone at the Silent Auction, held each year during the Northern Soybean Expo and Trade Show. Mandy Washburn, daughter of Aric and Elisha Washburn of Hope, was the proud recipient of this model tractor. Plan to check out the Silent Auction on February 18, 2014, at the Holiday Inn in Fargo.



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