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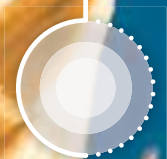
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*In the months leading up to
spring planting, agriculture
leaders were working across
the industry to boost farmer
profitability, address challenges
and maximize opportunities.*



Against the Grain

Meet & Greet

Meeting season has just about concluded here in the Northern Plains. Minnesota Wheat and our supporting partners hosted a series of winter meetings, capped by the multi-day Best of the Best in Wheat and Soybean Research. During this annual meeting, checkoff-supported researchers from across Minnesota and North Dakota provided updates and tips for growers to address the diverse set of agronomic and climate challenges we face each year.

In February, I joined my colleagues and Minnesota Wheat staff in Washington, D.C., for NAWG board meetings (I sit on the Domestic and Trade Policy Committee) and Hill Visits with legislators. We heard from USDA Secretary Tom Vilsack, who spent nearly 90 minutes visiting with us and discussing USDA's Farm Bill priorities. While we may not always share the same priorities, we appreciated the secretary's time and look forward to working with USDA throughout the year to craft the best Farm Bill possible.

As you'll read in this issue, there are varying opinions on the likelihood of a Farm Bill passing this year, but we remain hopeful that both parties will work together to put a Farm Bill on the president's desk by year's end.

We also enjoyed our meetings with Minnesota's congressional delegation and their staff. Often during D.C. Hill Visits, legislators are called into voting or another meeting or are simply unavailable to meet with us. That's OK, because this is also an excellent chance to visit with their legislative assistants, who may be new to D.C. and/or are unfamiliar with farm policy. While it's always preferable to visit face-to-face with lawmakers, engaging with staffers is also another chance to advocate, inform and push our messaging.

At the state level, legislation in St. Paul continues to move at a rapid pace, and MAWG advocates and our lobbying team are monitoring bills related to paid family leave, taxes, trade, pesticide regulations and more. At this rate, we expect more legislative movement as the session continues into late May. We are also excited to charter a bus down to St. Paul in March for our annual Hill Visits that we hold with our friends at Minnesota Farm Bureau. Our return



Mike Gunderson

to holding Hill Visits in St. Paul has been a long time coming. This is not only a great opportunity to visit with lawmakers and the Minnesota Department of Agriculture, but also a chance to build camaraderie with fellow directors. If you're a MAWG member and are interested in

attending, I encourage you to join us on the Hill.

We've now reached the point in a long winter where we're all champing at the bit to start spring planting. I know I am! Beyond Mother Nature's mood, there are plenty of unknowns in the months ahead – from the Farm Bill to ongoing geopolitical tensions that are causing wheat exports to drop – but this we know for certain: Whether we're in Minnesota, Montana or the Dakotas, our organizations (both on the policy and checkoff sides) are hard at work each day to grow markets, sponsor research and promote farm-friendly policies, all with a goal toward improving the economic outlook for wheat farmers throughout readership area.

Mike Gunderson farms in Bejou and is president of the Minnesota Association of Wheat Growers.



MAWG President Mike Gunderson (second to right) joins his colleagues during Hill Visits in Washington, D.C., in February 2023.

TAMING THE BULLS



BY BETSY JENSEN



Betsy Jensen is a Farm Business Management Instructor at Northland Community and Technical College. Follow her on Twitter at @jensenbetsyr.

& BEARS

The Crushing Doom of Farming

Will there ever be a day, month or year that I am not living under the crushing doom of farming? Will I ever believe the crop year might actually be okay? Can I ever appreciate that my farm made money last year before worrying about how much I could lose in the upcoming year?

You should have some sympathy for the farmers who work with me. After we complete their analysis of the prior year, I'll say something like, "Congratulations, you made a billion dollars, but we have big problems for this upcoming year." I don't give them a moment to celebrate the good news from last year before launching into the reasons against their capital purchase ideas for next year.

If my farmers are reading this, they are nodding their heads and laughing. They could make a trillion dollars and I would still be gloom and doom for the upcoming year. I know bad years can and will happen and I want to minimize the bad when it does arrive.

In my defense, this year when I show my farmers the "Planned versus Actual" page in their analysis, our actual expenses exceeded our planned expenses. Fortunately, prices and yields were also higher than planned. In general, net farm income was higher than we projected.

As an example, we budgeted \$50,000

for repairs and the actual expense was \$65,000. Same for fuel, crop insurance, chemical, nearly every expense was higher than our initial plan. Farm income was saved mostly by higher than anticipated crop prices.

As I create their plans for 2023, I worry about what we will find next winter as we compare the planned versus actual income statements. We bumped up 2023 expenses to match 2022 actuals, so maybe we won't have a big surprise on the expense side. I am worried about meeting or exceeding the planned revenue.

Forward contracting is the easiest step to ensuring we meet or exceed the planned revenue. We use Farm Service Agency planning prices when creating cash flows, and we can meet or exceed those planning prices today. We cannot control yields, but we have some control over prices.

Adding to the urgency of forward contracting is rising interest rates. It has become very expensive to hold grain in the bin. Delivering at harvest and paying down debt should be considered. If I am going to deliver this fall, I want that grain forward contracted. I do not want to be a price taker at harvest, I want to be a price maker. Seasonally prices go lower into harvest and if you are planning to deliver,

those bushels should be sold in advance.

Log into your bank account, and most will tell you "interest per day" on your line of credit. That is a cold slap to the face for many farmers. I know tax management is also a consideration for when to receive income but check on your interest expense per day. What if you could get a wheat check on Sept. 5 instead of Jan. 5? How much could you save on interest?

I do not feel a crushing doom for 2023. We can forward contract crops, price our inputs and have a manageable year. I am one of those unusual farmers who appreciates paying more for crop insurance because it means I have a better safety net. I would rather pay higher prices for good protection than cheaper insurance that doesn't offer much protection.

This is a year when most farmers can lock in profits instead of trying to minimize losses. It appears 2023 will be profitable. I have 20 years of my farm analyses on my computer, and when I chart my net farm income, it resembles a mountain range with big peaks and valleys. As much as I love the peaks, the valleys are terrifying. I hope 2023 is another mountain, but my goal in forward contracting is to minimize the valleys. I will avoid the crushing doom of farming. 🌾

BACK ON THE HILL

MAWG delegation returns to St. Paul

By Drew Lyon

In February, Erik Younggren, a Minnesota farmer and former president of the National Association of Wheat Growers, returned to the nation's capital for the first time in several years.

"I still know my way around," Younggren said. "I didn't get lost."

Younggren figures to enjoy a similar experience, albeit on a smaller scale, in March when he joins fellow members of the Minnesota Association of Wheat Growers (MAWG) on a bus trip down to St. Paul for a Hill Visit to the state Capitol. Following a 2022 election that brought nearly 70 new lawmakers (about 33% of the legislature) to St. Paul, Younggren will meet plenty of new faces.

"A lot of the issues are the same," Younggren said, "but the operations are different."

The Hill Visits are the first since March 2020. Two election cycles have come and gone since most MAWG leaders were able to engage face-to-face with lawmakers.

"I haven't been down there for a really long time," said Younggren, who returned as a MAWG director in 2022 after a roughly seven-year hiatus. "For us, the message is always the urban-rural divide in Minnesota and how we address that."

The legislative session began in early January and has continued its brisk speed. In contrast to most five-month biennial sessions, which are typically more deliberate, "everything is happening at the same time," MAWG legislative strategist Bruce Kleven said.

Democrats retained full control of the Legislature for the first time since 2012, and the DFL has maximized its majority by working toward passing legislation on carbon-free energy, abortion rights, voting rights, paid family leave, health care, recreational cannabis use and more.

"I'm a little bit overwhelmed at the pace at the state legislature," MAWG Treasurer Tate Petry said. "It'll be good to get our faces in and hopefully convey the issues we see with the bills being presented and the challenges they'll pose to rural communities and agriculture."

MAWG continues to monitor bills, including Gov. Walz's proposal to increase the grain indemnity fund by \$5 million to protect farmers if an elevator or buyer becomes insolvent.

MAWG is pushing back against bills that would regulate use of treated seed and allow cities regulatory authority to restrict pesticide use.

"For MAWG, we don't have a lot of growers raising wheat in the city," Kleven said, "but the point is, you crack the state preemption, and it can be cities today and counties tomorrow. And there's a legal question as to whether cities can even do this, because the Minnesota Department of Agriculture is the sole delegated authority to administer the federal pesticide regulatory program."

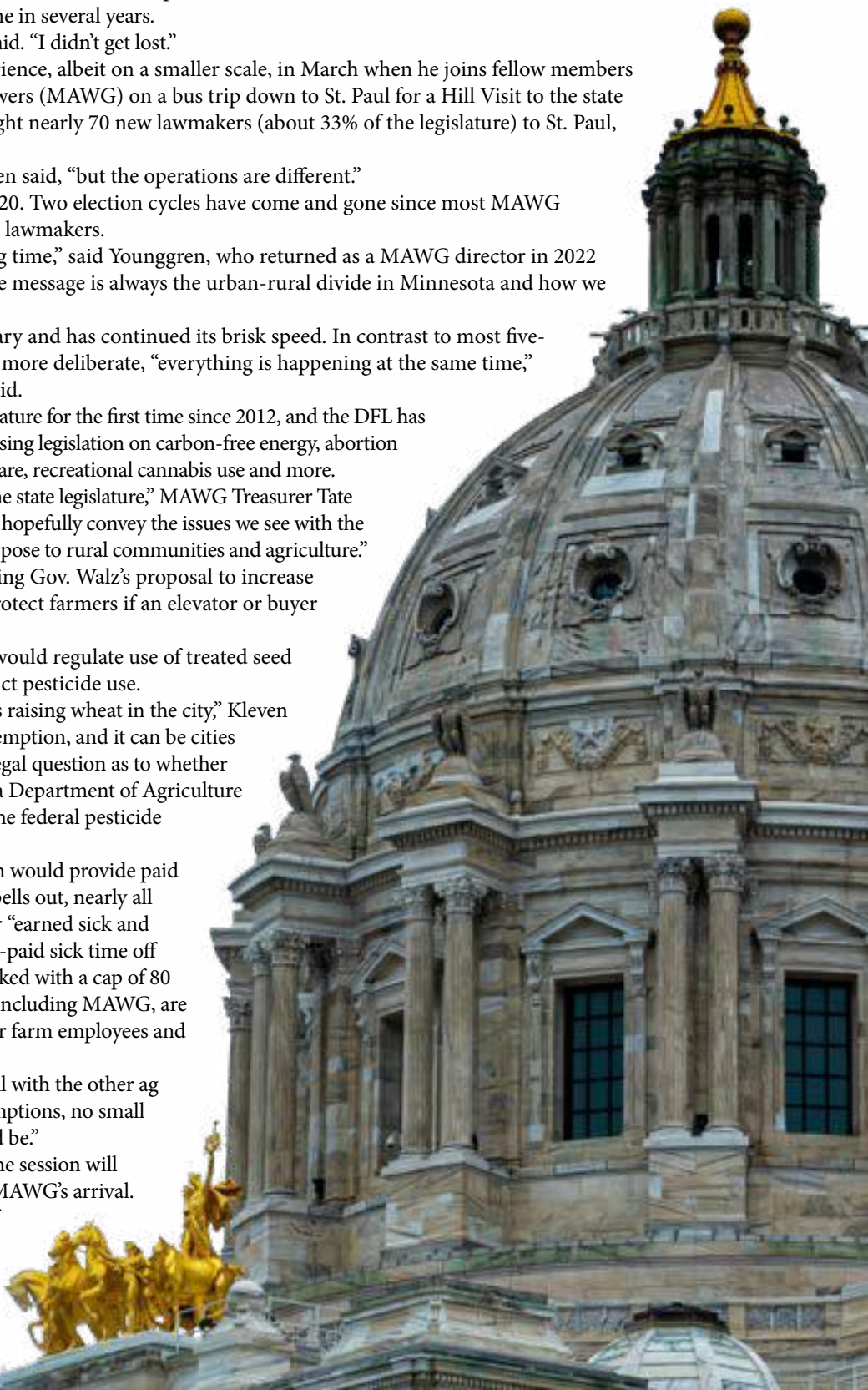
In February, the House passed HF19, which would provide paid safe and sick leave to employees. As the bill spells out, nearly all Minnesota workers would become eligible for "earned sick and safe time." Employees would accrue employer-paid sick time off at the rate of one hour for every 30 hours worked with a cap of 80 accrued hours. Farm groups across the state, including MAWG, are urging lawmakers to include an exemption for farm employees and small businesses.

"We have raised our concerns about this bill with the other ag groups," Kleven said. "There are no farm exemptions, no small business exemptions, and we feel there should be."

After the release of the February forecast, the session will take on new tenor in March, just in time for MAWG's arrival.

"It will be good to get back in the swing of things and meet all these new members,"

Kleven said. 🌾



Legislative Bus Trip to St. Paul



March 20-21, 2023



MN Wheat Growers & Minnesota Farm Bureau

Ride in comfort on a 50-passenger coach bus

Join members from MN Wheat and MN Farm Bureau on an overnight bus trip to St. Paul where participants will meet with legislators from their district and others who served on committees important to agriculture. This is your opportunity to tell your story on how policies and laws affect your farm.

What to expect? All attendees will:

- Be updated on state legislative issues from MN Wheat & MN Farm Bureau public policy staff
- Team up with other growers and meet with individual legislators (*appointments are pre-arranged*)
- Meet with other growers on a relaxing round-trip motor coach ride to St. Paul

Schedule

Monday, March 20, 2023

11:00 a.m. Depart Red Lake Falls
11:30 a.m. Depart Fertile
12:00 p.m. Depart Twin Valley
12:30 p.m. Depart Hawley
1:10 p.m. Depart Rothsay
1:40 p.m. Depart Fergus Falls
- - - *Other pickups along the way if needed* - - -
- - - *Lunch will be served on the Bus* - - -
4:40 p.m. Arrive St. Paul - check in to hotel
Radisson St Paul downtown
5:00 p.m. Legislative update & group dinner
Issues briefing with Bruce Kleven,
MAWG Legislative Strategist
TBD Capitol night tour

Tuesday, March 21, 2023

7:00 a.m. Breakfast at hotel
8:15-11:00 a.m. Producers Team Appointments
with individual legislators
10:00 a.m. MFBF briefing @ MDA offices
11:00 a.m. Rally on Capitol Hill
12:00-3:00 p.m. Legislative appointments *continued*
3:30 p.m. Depart St. Paul
- - - *Supper along the way* - - -
6:30 p.m. Arrive Fergus Falls
7:00 p.m. Arrive Rothsay
7:35 p.m. Arrive Hawley
8:10 p.m. Arrive Twin Valley
8:30 p.m. Arrive Fertile
9:00 p.m. Arrive Red Lake Falls

Registration Cost:

~ FREE for all MN Wheat and MN Farm Bureau members ~ \$150 for non-members
Registration includes: Transportation, meals and hotel room. (Hotel room based on double occupancy.)

To participate, call 218-253-4311 ext. 7

Limited to the first 45 registrations.

Home on the Hill

Wheat leaders visit nation's capital, prep for Commodity Classic

By Drew Lyon

Ada farmer Tate Petry, treasurer of the Minnesota Association of Wheat Growers (MAWG), embarked on his first advocacy trip to the nation's capital. While walking the halls and visiting with Minnesota's congressional delegation, Petry was surprised at the lack of security restrictions on Capitol Hill.

"It was far more accessible than I understood," said Petry, who along with MAWG President Mike Gunderson, represents Minnesota farmers on the National Association of Wheat Growers (NAWG). "It's not more of an endeavor than Hill Visits in St. Paul."

Petry, who was appointed to MAWG in 2020, joined Minnesota Wheat leaders, including Gunderson, and staff in February for a trip to Washington, D.C., for national board meetings and winter Hill Visits. Petry and his colleagues visited with legislative staffers and spoke face-to-face with Reps. Michelle Fischbach and Brad Finstad and Sen. Tina Smith. Rural development, housing and child care also were discussed during meetings with Sen. Amy Klobuchar's staff and Sen. Smith.

"We had a lot of good discussions," Petry said. "They have a good understanding of some of the needs there."

Farm Bill priorities, including protecting crop insurance, were key discussion points. NAWG opposes any cuts to crop insurance that could limit the capability of the partnership between the federal government and private insurance industry to deliver effective risk protection to its members.

While many legislators are expressing optimism about a smooth, timely extension of the Farm Bill, Petry tempered his expectations.

"It's going to be a later start (to the Farm Bill) than most years," Petry said. "Farm groups are more apprehensive (than lawmakers) as to whether this is going to be achievable or not, considering we haven't had some of the hearings that usually would be happening."

Spreading the word

NAWG's other top Farm Bill priorities include supporting



voluntary conservation programs and doubling resources for the Market Access Program (MAP) and Foreign Market Development (FMD) program to increase agricultural exports. More than half of the nation's wheat grown is exported, and, according to a recent economic study by agricultural economists, NAWG's request to double MAP and FMD funding would boost farm exports by \$44.4 billion from 2024 to 2029 and support 64,000 jobs.

In early February, lawmakers – including Sen. Smith and Rep. Brad Finstad – introduced bipartisan and bicameral legislation that would strengthen the effectiveness of MAP and FMD. MAP's authorized funding has not changed since 2006, and FMD funding has stayed stagnant since 2002.

“We are grateful for the work being done in Congress to lay the foundation for a strong 2023 Farm Bill that invests in programs that promote U.S. wheat and other agricultural products,” NAWG President and Washington wheat farmer Nicole Berg said. “However, even with these marker bills that invest in the MAP and FMD program, we still have a long way to go in educating members of Congress on why these resources are needed.”

NAWG has launched an online campaign on its website, wheatworld.org, to encourage producers to contact their federal senators and representatives and urge passage of the legislation.

“We need wheat growers to help spread the word and tell the story of why this programmatic investment is necessary and how it would help grow our national economy,” Berg said. “The campaign makes it easy for growers to contact their legislators, which truly makes a difference in how these decisions are made and votes are cast. I hope all growers participate, so our voices are heard loud and clear on Capitol Hill.”



Sen. Tina Smith (middle) sits on the Senate Ag Committee and recently introduced legislation that would increase agricultural exports by \$7.4 billion by doubling funding for the advertising programs of farm goods in foreign countries.

Minnesota farmer Rhonda K. Larson serves as chair of U.S. Wheat Associates (USW), the organization that oversees the national wheat checkoff program. USW held its own board meetings in D.C., and works alongside MAWG. However, USW cannot use checkoff funds for lobbying.

“Our organization wants to thank our friends at NAWG for focusing on the need to increase MAP and FMD funding in the next farm bill,” Larson said. “Studies have shown that the return on investment from MAP and FMD is very strong, but our activities overseas and impact are limited today by the erosion of these resources over time.”

In March, Minnesota Wheat leaders travel to Orlando, Fla., for NAWG's Annual Meeting at Commodity Classic. NAWG will then hold its final board meeting and set its Fiscal Year 2024 budget before spring planting commences. 🌾

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A Growing Tradition

North Dakota Wheat Commission
brings its crops to the world



By Drew Lyon

Since 1959, the North Dakota Wheat Commission (NDWC) has helped to grow the state's hard red spring wheat (HRS) and durum industries through its checkoff system. Sixty years later, those checkoff investments continue to improve the economic outlook for North Dakota growers, who can boast of their state's status as the nation's leading producer of HRS and durum. North Dakota producers harvested 5.3 million acres of HRS in 2022, and yields averaged 52 bushels per acre, a 35% increase from a drought-plagued 2021. North Dakota's durum production typically totals around 35 million

bushels, accounting for about half of the nation's entire production output.

But NDWC doesn't rest on its laurels. To maintain its superior quality in the global marketplace, the organization must keep up with the Joneses.

"There's wheat grown across the world, so we need to make sure that we keep up our quality and pay attention to what our customers need," NDWC Market Development and Research Manager Erica Olson said. "When you get into some of the quality, a lot of producers know that it's somewhat important. But, really, that's imperative to keeping our competitive edge for spring wheat and durum."

Along with the other spring wheat states – Minnesota, Montana and South Dakota – NDWC collaborates with North Dakota State University (NDSU) on an annual wheat quality survey as a marketing tool for domestic and overseas customers. The survey has been in publication for more than 60 years and typically gathers around 750-800 samples.

"It's a pretty big undertaking, between the wheat samples collection, the quality analysis that is done at NDSU, the compilation of the report and then our experience using the data when we meet with customers," Olson said. "Our customers need that quality analysis."

NDWC District 5 Commissioner Scott Huso (far right) shows an international trade team a sample of his 2022 spring wheat crop. Photo courtesy of NDWC.



North Dakota wheat producers export their crop across 100 customer countries around the globe. About 70% of hard red spring wheat is shipped to Asian markets. The top 10 HRS export markets are the Philippines, Japan, Taiwan, Mexico, Korea, Thailand, Nigeria, El Salvador, Italy and Jamaica, respectively. After two challenging marketing years due to the pandemic, supply chain issues and geopolitical tensions, NDWC is excited to welcome back international trade teams and build relationships later in 2023. The trade teams usually visit with NDWC leaders during the growing season.

“Buyers like to ask questions, see wheat in the field and know where it’s coming from,” said Olson, who’s been with NDWC for 16 years. “Personal connections are very important.”

Research components

North Dakota Wheat Commission invests checkoff resources not just through international marketing – which is conducted in tandem with U.S. Wheat Associates – but domestic promotion and research projects primarily through NDSU. Each year, NDWC invests \$1.5-1.8 million in public research projects focused on breeding, end-use quality, agronomics and soil science. NDWC also directs checkoff resources toward the Northern Crops Institute and Wheat Marketing Center. In total, NDWC sponsors about 40 research-related projects each year through the checkoff, which equates to 1.5 cents per bushel at the point of sale.

“Research is a big component of what we cover,” Olson said. “We look into specific research projects and feel it’s important to have that public-funded, extension-type work done to help our farmers.”

The Commission’s investment in the spring wheat breeding program directly benefits the state’s growers.

“The breeding program, that’s something producers can see directly when a new variety is released or some of the more

agronomic-type research that (NDSU’s Clair Keene and Dave Franzen) are doing,” Olson said. “That’s tangible for producers to understand.”

Olson said NDWC appreciates collaborating with commodity groups that share common interests and classes of wheat. Duplicating efforts can be costly and counterintuitive.

“It’s great to work with Minnesota Wheat,” she said. “To have that ear right there to give them a call to discuss issues, if we need help or vice versa, it’s a great working relationship. We’re not competing against each other, so why not work together?”

National stage

NDWC also works with the North Dakota Grain Growers Association and the U.S. Durum Growers Association to tackle farm policy initiatives in Bismarck and Washington, D.C. NDWC’s board is broken up into districts and comprises seven producer-leaders from across the state. Six commissioners elected by their peers, with one commissioner appointed by the governor. Directors serve four-year terms and represent the diverse interests and challenges of the state’s wheat producers.

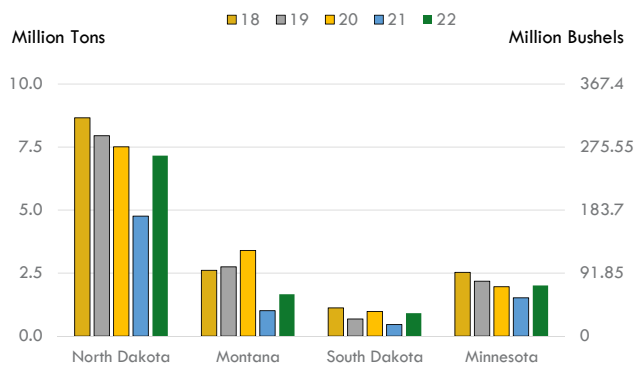
“Our board is great with staff,” Olson said. “Each board member has their specialty and strong point. Some do overseas travel, and others like to stay closer to home.”

NDWC supports two farmers – Jim Pellman and Phil Volk – on USW. Earlier this year, Pellman, who farm nears McClusky, N.D., was elected to serve as USW secretary/treasurer. His term starts in July, making Pellman the fifth North Dakotan as a USW officer since the 1980s.

“Jim Pellman brings a broad skill set in agriculture and wheat production to the officer team at USW and follows earlier NDWC members who served as USW officers and chairs,” NDWC Administrator Neal Fisher said.

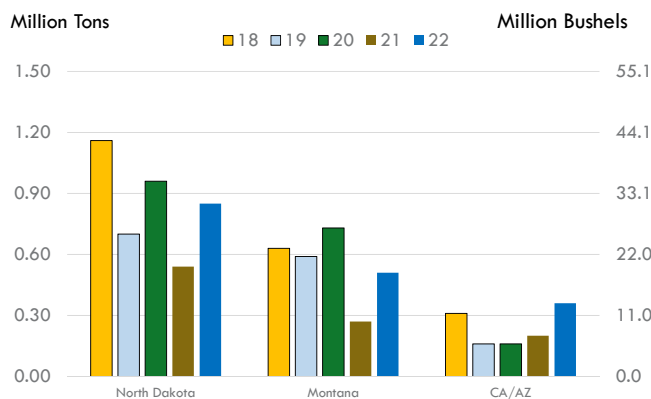
To learn more about NDWC, visit ndwheat.com or follow the organization on Facebook. 🌾

U.S. SPRING WHEAT PRODUCTION BY STATE



The Prairie Grains readership area is the nation’s largest producer of spring wheat.

U.S. DURUM WHEAT PRODUCTION BY STATE



The Prairie Grains readership area is the nation’s largest producer of spring wheat.



Image courtesy of Daren Mueller, Iowa State University, Bugwood.org

IDC: Be on the Lookout

For North Dakota and Minnesota soybean growers, Franzen said farmers should be aware of Iron Deficiency Chlorosis (IDC), which can cause plant leaves to turn yellow, leading to substantial yield loss. This is a particular problem for growers in eastern North Dakota and northwest Minnesota.

"It's pretty remarkable. ... You can see entire quarter sections that are entirely yellow," Franzen said. "This is not the way they're supposed to look."

Franzen said that soil nitrates lead to increased IDC rates. Franzen also reminded growers to not fertilize soybeans with nitrogen.

"There's just absolutely no need," he said. "It's not going to hurt or help. ... The nitrogen is just a drain on operating expenses."

Franzen's full presentation on plant nutrition and soil management is available on the NDSU Carrington Research Extension Center's YouTube page.

Checkoff calculations

Longtime NDSU research talks nitrogen rates, 'astounding' advancements in ag

By Drew Lyon

Dave Franzen has witnessed plenty of growth in Northern Plains agriculture during his nearly 30 years as a North Dakota State University Extension soil specialist.

"I was just talking to somebody about it yesterday," Franzen said in February from his office in Fargo. "The people who came before me were astounded at how much change there was, and frankly, since I came here (in 1974), it's still astounding."

Franzen focuses on soil management through research partially funded by checkoff-supported groups, including the North Dakota Wheat Commission.

"Dave's fun to work with and is very popular with producers," NDWC's Market Development and Research

Manager Erica Olson said. "They really relish his information."

For 2023, Franzen has updated NDSU's one-of-a-kind Nitrogen Spring Wheat-Durum Calculator, which was established in 2010 and can be downloaded as an app.

"In our region, we have the only nitrogen calculator around, and most of the wheat in Minnesota is in the northwest part of the state," he said. "My colleague in Minnesota, Dan Kaiser, feels our calculator is also appropriate to use up in that area. I'd encourage people from North Dakota and across the river to pay attention to it, because it relates to maximizing yield and making sure the protein is appropriate but not going overboard on nitrogen."

Franzen is also promoting new, checkoff-sponsored research that employs optical sensors to determine the need for post-anthesis nitrogen in wheat.

“With the high cost of fertilizer and the uncertainty of discounts or premiums available for spring wheat, farmers will benefit from knowing that they can use sensors to determine the need for late-season nitrogen application at flag-leaf to increase grain protein,” he said.

Although protein enhancement likely hasn’t been at the forefront for many buyers, Franzen said farmers should apply nitrogen immediately following the flowering stage.

“It’s about getting people to go back to basics,” Franzen said. “Even though crop prices are high, the input costs are also high, so farmers have to be careful and conservative. The further west you go, the more conservative you have to be.”

Staying cautious

Franzen cautioned growers to be aware of nitrogen-fixing bacteria that can be purchased in a container. He said his colleagues in the region have conducted research on the products and found spotty success rates.

In 53 sites where it was tested, only two showed a slight benefit.

Buyer beware.

“I think it’s good to be curious about new products, and I’d encourage them to be curious about new products,” he said. “I’d encourage them to be curious about the burden of proof in these things, but the burden of proof is on the farmer.”



NDSU's Nitrogen Calculator app application provides NDSU crop nitrogen recommendation calculators for use in North Dakota corn and spring wheat. It can be downloaded on iPhone and Android devices.

Franzen recommended that interested growers first try replicated treatment strips in the field and test with a yield monitor at the end of the year to determine a value.

“Just don’t take advertising at face value,” he said.

Franzen said he tailors his programs around the agronomic challenges facing farmers, and checkoff support is crucial to researching potential production threats.

“We take it so seriously,” he said. “The farmer end user is the person I and my colleagues have in mind, so we listen to the producers. They tell us what their issues are, and we try to address those and anticipate things they might have to address in the future.” 🌾



AG SERVICES

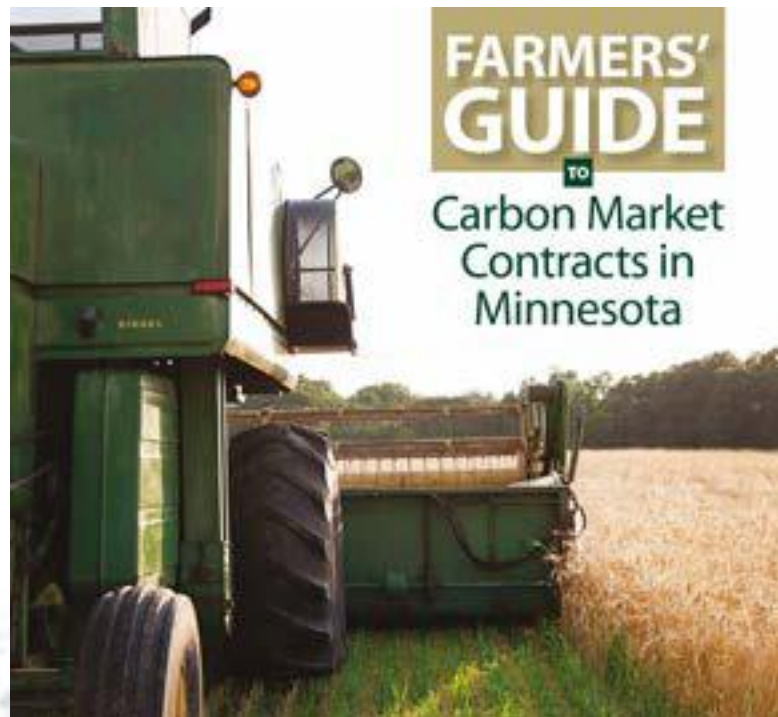
ARGYLE | BADGER | CROOKSTON | DRAYTON | ERSKINE | GRAND FORKS
GREENBUSH | HALLOCK | HAZEL | HILLSBORO | HUMBOLDT | LAKE BRONSON
LARIMORE | OKLEE | OSLO | ROSEAU | STEPHEN | WARREN

THANK YOU TO OUR FARMERS AND
RANCHERS FOR YOUR DEDICATION
TO FEEDING THE WORLD!

Minnesota Farmers Union (MFU), in partnership with the Minnesota Department of Agriculture's (MDA) Minnesota Ag Water Quality Certification Program (MAWQCP) and Farmers Legal Action Group (FLAG), published the first edition of its Farmers' Guide to Carbon Markets in Minnesota in early 2023.

With one-fifth of the world's largest companies setting net-zero emissions targets, farmers are being asked to make changes to their operations that sequester carbon and sell companies credit for that sequestered carbon. These relations between farmers, large companies and often third-party vendors are defined by contracts.

The 32-page guide written by attorneys Stephen Carpenter and Lindsay Kuehn is filled with information to help farmers navigate complex carbon contracts. There's a handy question-and-answer section that draws on text taken from actual contracts and information to better equip farmers for discussions with the representative offering the contract. Through the guide, MFU hopes to respond directly to farmers' concerns, empower new leaders on climate and to advance solutions on agricultural and working lands.



The booklet tackles three approaches:

- Discusses the current market for carbon contracts and in particular some of the aspects of these markets that can become important for the contract terms
- Discusses a few points in Minnesota contract law that can be important for carbon contracts
- Looks at selected contract language and the meaning of that language

MAWQCP-certified producers who have obtained the Climate Smart Endorsement will receive a hardcopy of the Farmers' Guide to Carbon Markets.

"Minnesota farmers now have greater opportunities to combat climate change by tapping into this new and evolving carbon marketplace; however, we must recognize the concerns farmers may have," said MDA Commissioner Thom Petersen. "We're pleased to partner with Minnesota Farmers Union and Farmers Legal Action Group to develop this guide that will ensure farmers have access to the information they need to succeed in this evolving carbon contract arena."

Ten farmers and industry leaders served as advisors to the guide.

"The carbon markets are really in their infancy, without a lot of regulation and common structure," said MFU member and Farmers Guide to Carbon Markets advisory group member Pat Lunemann of Twin Eagle Dairy in Clarissa. "Carbon markets are like the 'Wild, Wild West' where everyone is shooting from the hip. No entity is there to assure that contracts are fair to both parties involved. Going forward, there is much potential for farmers to capture rewards for innovative practices on their farms and the guide describes the opportunities and the obstacles that may be in front of us."

The Farmers Guide to Carbon Markets is available on the MDA's website. Farmers and landowners interested in enrolling in the MAWQCP can contact their local Soil and Water Conservation District or visit MyLandMyLegacy.com.

Brought to you by the Minnesota Department of Agriculture.

IT'S NOT JUST YOUR LAND. IT'S YOUR LEGACY.

The Minnesota Agricultural Water Quality Certification Program rewards farmers like you for what you do best, taking care of your land and its natural resources.

To get started and learn more, contact your local soil and water conservation district or go to:

MyLandMyLegacy.com





Montana movements

Montana Grain Growers Association President Nathan Keane (middle) speaks to the audience at MGGA's 2022 Annual Convention.

Grain Growers tackle policy, research in Big Sky Country

By Bailey Grubish

The Montana Grain Growers Association (MGGA) is ramping up for the legislative session and making some organizational updates. Recently, the policy group revised its mission statement and conducted a strategic planning process.

"We're slowly evolving – working on some internal stuff, some marketing and some long-term planning," MGGA Executive Vice President Alison Vergeront said. "It's been really fun to work with the board on our next-five-year goal plans (and looking at) the wellness of the association from the inside out."

MGGA worked with the National Association of Wheat Growers and the National Barley Growers Association on various policies during winter Hill Visits in Washington D.C. MGGA met with the Domestic Trade Committee during the visit.

"We really had a front-row seat to ag policy, in general, for the Farm Bill, which has been great," Vergeront said. "We've had some great conversations with Risk Management Agency and USDA. Different programs for promotion funding, research and crop insurance, of course, are our big-ticket items."

Vergeront said MGGA plans to advocate for funding for disaster-relief programs. In the past two years, many of the state's grain producers have been plagued by droughts and other weather calamities.

"We kind of have been playing defense on a lot of other things," she said.

Day-to-day lobbying

Montana's legislative session occurs every other winter and is held for 90 days. MGGA's lobbying team is present in the Capitol in Helena where directors testify on issues ranging from research budgets for universities to farm equipment taxes. MGGA also works closely with other associations on

advocating for rural mental health.

"We have a really good working relationship with the governor's office and with the Department of Agriculture," Vergeront said. "We have a great working relationship with all of our congressional members."

Vergeront noted that this is the first year MGGA has had four congressional offices since 1993, as a second representative district was added in Montana for this session following the 2020 census.

"We've had good conversations with crop insurance protection and just ensuring that longevity of that safety net to just funding for research and market development," Vergeront said. "Montana is a big exporter of our goods, so that's really important that we keep that open."

In addition to Farm Bill priorities and working alongside other farm advocacy associations, MGGA focuses on lobbying for research funds to support agronomic challenges.

"We have our research centers across the state of Montana, so that's very important to us as we continue the research for the wheat and barley industry," Vergeront said. "We're very passionate about the University system and research in general."

Upcoming events

In March, a delegation of MGGA leaders will travel to Commodity Classic in Orlando, Fla. Following spring planting, MGGA will hold its fundraising golf tournament in June in Great Falls.

The organization is also planning its Annual Convention & Trade Show for later in 2023.

"There are mental health speakers and technology speakers. It's a huge opportunity to educate members and the general public," Vergeront said of the convention. "We look forward to seeing folks in person, and then that's where we also set our policy resolutions for the upcoming year." 🌾

THE 'BEST' TIME

Annual research conference uncovers latest checkoff-supported data

By Sydney Harris

In true northern Minnesota fashion, the wind was roaring as industry growers made their way to Moorhead for Day 2 of the Best of the Best in Wheat and Soybean Research conference.

Dr. Robert Koch with University of Minnesota Extension kicked off the day with a soybean gall midge (SGM) outlook. A new threat to Minnesota soybeans, SGM is found in soybean fields, typically around the edges, adjacent to last year's soybean fields.

"Soybean gall midge hasn't been detected anywhere else in the world except the Midwest," Koch said. "We can't count on our cold winters to knock down the population and chemical control is inconsistent, but we are looking at biological control."

Covering the multi-faceted effects of cover crops, Dr. Anna Cates with University of Minnesota Extension highlighted their benefits, including reducing soil water during wet times and increasing it when it's dry, feeding microbes, building soil structure and reducing erosion. The rest of the morning covered hot topics in soybean research, including soybean sudden death syndrome, which is beginning to spread across Minnesota and North Dakota and iron deficiency chlorosis, which generates \$260 million dollars in yield loss annually.

Dr. Barney Geddes, an assistant professor at NDSU, closed out the morning with tips for maximizing nitrogen-fixing microbes.

"Fertilizers are an important tool in the farmer's tool belt to get maximum yields. In fact, they are so important that half of the world currently depends on fertilizers for food. If they didn't exist, tomorrow, half the world would starve immediately," Geddes said. "They're important because

nitrogen is important to get those higher yields."

Just when backs were starting to ache and legs began cramping, attendees were able to rotate to the multiple hands-on demonstrations, covering a range of topics. Dr. Anthony Hanson with University of Minnesota Extension prepared his audience for scouting new soybean insect pests, while Friskop covered foliar wheat disease importance and identification and Cates gave a soil health demonstration. Yield monitoring with Dr. Rob Proulx and grasshopper identification and management with Patrick Beauzay rounded out the hands-on demonstration line up.

After lunch, Daryl Ritchison, director of the North Dakota Agricultural Weather Network gave an overview of what he is predicting in 2023.

"I think we will have a good start to the 2023 planting season," Ritchison said. "I'm expecting a drier start with early summer rains. But always remember that X does not equal Y in weather."

Dr. Debalin Sarangi of University of Minnesota Extension followed with management strategies for weeds resistant to herbicides from multiple modes of action and Dr. Lindsay Pease, also with U of M Extension, wrapped up the day with her research on drainage tile.

The Best of the Best is sponsored by a host of organizations, including the Minnesota Association of Wheat Growers, North Dakota State University and University of Minnesota Extension, Minnesota Association of Wheat Growers, Minnesota Soybean Research & Promotion Council, North Dakota Soybean Council, North Dakota Grain Growers Association and North Dakota Wheat Commission. 🌾

Yield Monitor Mayhem

Yield maps have greatly advanced crop management. But like with all technologies, there are kinks that need to be ironed out.

Hosting the "Yield Monitor Mayhem" hands on demonstration, Dr. Rob Proulx with NDSU Extension explained how Yield Editor, a USDA software program, can fix erroneous data, known as artifacts, inherent to yield monitoring. Artifacts are errors caused from the technology and method used to collect data.

Fixes for common artifacts:

1. Flow Delay - Specifies the true position of where the crop was cut
2. Start Pass Delay - Trims data points from the beginning of a pass
3. End Pass Delay - Trims data points from the end of a pass
4. Minimum Swath Width - Removes data points from areas with less than a full header width
5. Max/Min Velocity - Removes data points from areas harvested outside a specified range of ground speeds
6. Smooth Velocity - Removes data points from areas harvested with a sudden ground speed change

THE 411 ON BLS

NDSU researcher talks wheat disease at Best of the Best

By Sydney Harris

Each growing season, farmers go to battle for their crops. Their enemy? Unwanted diseases and insects.

Bacterial Leaf Streak (BLS) is one of those pesky diseases that farmers must brace themselves to combat. During the Best of the Best in Wheat and Soybean Research meeting, North Dakota State University Extension Associate Professor Andrew Friskop updated the audience on the latest BLS news.

“We can’t fall asleep on Bacterial Leaf Streak,” Friskop said. “When we begin to have a bigger problem with it, that’s when we start to run into more yield loss concerns.”

Most of us have fallen victim to Googling our symptoms – before you know it that mysterious spot suddenly

turns into a rare flesh-eating bacterium with no known cure. Identifying wheat diseases can be just as treacherous.

Luckily, Friskop had a few pointers to make sure farmers and agronomists are able to properly identify BLS.

“The very first symptom and sign of this pathogen is visible water soaking,” Friskop said. “It almost looks like a grease spot near the center of the leaf. And, if a raindrop hits that ooze, it’s going to spread out and build from a center focus.”

As if the news couldn’t get any worse, clicking on another link brings you more bad news: BLS largely affects the flag leaf.

“Most of the damage we see occurs on the flag leaf, the most important leaf for the plant,” Friskop said. “Any type of damage to the flag leaf will affect yield.”

Another telltale symptom of BLS is black chaff.

Instead of amber waves of grain, the field may look a bit more ominous.

“What this is, is the flag leaf has that bacterial ooze which splashes on top of the head, resulting in these black linear lesions,” said Friskop. “That means that the bacteria moved to the seed, which is your fore warning. If the bacteria move up to the seed, we know how this pathogen can survive from year to year.”

Thinking back to high school science class, bacteria flourish in specific environments. Since the region can be subjected to harsh weather, it’s natural to hope that BLS wouldn’t do well in certain conditions. Unfortunately, BLS can survive in a wide temperature range (between 59–86 degrees Fahrenheit) and thrives in high humidity and free moisture, conditions typically experienced in a Minnesota or North Dakota summer.

What BLS certainly doesn’t like is a lack of moisture. In 2017 and 2021, BLS wasn’t detected because those were drought years, which most growers painfully remember.

“If there’s one thing that can really put a curb on BLS, it’s drought,” Friskop said. “But the yield damage from drought is worse than the consequences of BLS. The other thing I want to remind you of is that coming out of a drought year doesn’t mean that you get rid of the bacteria.”

Frustratingly enough, fungicide won’t touch BLS.

“It’s important to separate BLS from other diseases because if we’re managing a bacterial disease, we can’t spray a fungicide,” said Friskop. “For instance, if you mix it up with tan spot which is a fungus, and you spray it, it’s not helping your cause because you’re putting in poison that’s not going to be able to manage that disease.”

Nothing but good news, huh? So, the burning question is: What do I do if I spot BLS in my field?



Andrew Friskop’s NDSU Extension program focuses on delivering management information on small grain diseases.



Symptoms of BLS often become most evident following after thunderstorms and high-wind rain events. Photo courtesy of Andrew Friskop.

The answer, Friskop said, is to learn from the past, bide time and plan ahead for the next growing season.

“Unfortunately, once you see it in your field, you’ll have to ride it out and reassess the next year,” Friskop said. “Don’t think about managing it this year, think about next year. Think about that variety selection and what you’re going to use. Really start asking those questions.”

The best action for growers to take to mitigate their risk of BLS is to carefully select their seed variety.

“What do I recommend? A variety that has a BLS score of five or less. That’s when we really start to see that yield loss,” said Friskop. “We still have to dive into this a little bit more because we do have some varieties that behave a little bit differently but in general, five or less.”

Naturally, yield loss varies depending on the BLS level, but the greatest yield loss risk (up to 40%) will occur with varieties rated six or higher – hence, the importance of variety selection.

Though there isn’t a lot that growers can do to eradicate BLS once it appears, there are a host of checkoff-supported researchers who are relentlessly searching for a better solution. As of now, there haven’t been promising results – but that doesn’t mean there never will be.

“As far as anything on the horizon? We haven’t found anything yet,” Friskop said. “We evaluated 24 treatments to see if we can manage this disease in the field. We sprayed it twice and used a whole portfolio of you name it, but we still haven’t found anything.”

This summer, growers should keep their eyes peeled for BLS symptoms. And, should it rear its ugly head, pay close attention to the variety chosen the following year. 🌽

The flag leaf is the most important leaf for yield potential, indicating the transition from crop growth to grain production. Photosynthesis in the flag leaf provides essential carbohydrates that support grain filling.



Yield loss due to BLS can vary, it has the potential to cut yields by nearly 50%.

Changing the Game

NCI releases Impact Analysis, publishes third handbook

By Drew Lyon

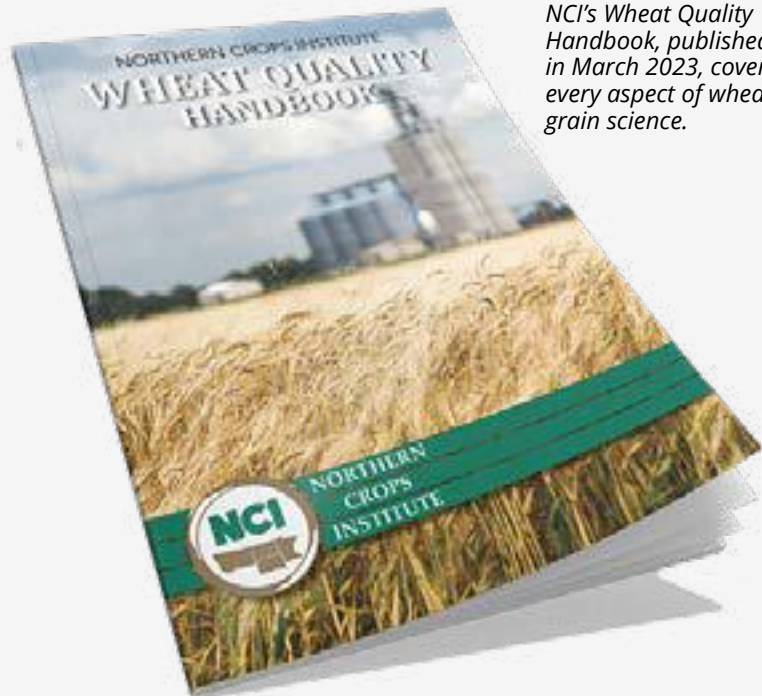
After multiple years navigating the sudden, unexpected shift to virtual webinars and meetings, Northern Crops Institute (NCI) has released the latest findings from its semiannual survey of international customers.

The survey culled more than 100 respondents who participated in NCI shortcourses during the height of the pandemic in 2020 and 2021. In 2020, a survey was conducted with customers who participated in NCI events in 2018, and NCI was interested to see how their views changed during the pandemic.

“Our goal is to wait at least a year from when they attended a course because we want to see how they change their behavior,” NCI Director Mark Jirik said. “Overall, the results weren’t that different (this year).”

Jirik, a former commodities trader, said he was surprised at the spike in overseas participants who reported an increase of commodities purchased following their participation in NCI courses, which take place in-person and online and throughout the year.

“That’s impressive,” Jirik said. “Not only are people buying more from the U.S., but their overall usage as a result of what they’re learning here is going up as well.”



NCI's Wheat Quality Handbook, published in March 2023, covers every aspect of wheat grain science.

The survey also saw a marked improvement in customers willing to make economic contributions in NCI's coverage area (Minnesota, North Dakota, South Dakota and Montana). Twenty-four percent reported their investment in the region has increased, up from around 17% in the previous survey. Results were mixed when customers were asked if they preferred in-person or online courses.

"The in-person courses take a lot of effort to fly to Fargo," Jirik said. "But for us, it allows us to reach a whole new audience and tell that message of U.S. wheat, U.S. soy and U.S. corn quality to a different audience at a bit of a different level."

NCI enjoys support from checkoff groups from across the region. Those resources are critical toward NCI's research activities and courses.

"From a funding and content standpoint, we couldn't do our work without the checkoff partners," Jirik said. "Our job is to help the checkoff organizations by growing markets for farmers. I can't stress enough how important that is to what we do."

In April, NCI will host an in-person Pasta Production and Technology course. Other 2023 courses include an educational primer on the soybean industry, grain procurement management and grain industry leadership. International trade teams are also expected to visit the region during the growing season. In 2024, NCI will conduct its business at its new home at the Peltier Complex on the North Dakota State University (NDSU) campus.

"We're moving boxes soon," Jirik said, "(The new building) will change the game for NCI and the region."

Book smart

In recent years, NCI has begun publishing handbooks. The first, the Fullfat Soybean Meal Handbook, was published in 2020 and detailed the processing and feeding of fullfat soybean meal to the major animal groups.

Purchasers of the handbook also received access to four pre-recorded webinars. In 2021, NCI released the Ancient Grains of the Great Plains Handbook.

The purpose covered the ancient grains categories, their characteristics and uses. The handbook was inspired by NCI's popular "Cereal Innovators" webinars.

"We saw a lot of interest from domestic people in ancient grains," Jirik said. "We know there are businesses that started as a result of our Ancient Grains Conference, which we'll have again in July at the Oliver Kelley Farm. ... It was one thing that built onto another."

The organization is printing its third handbook in 2023. The Wheat Quality Handbook was conceived after NCI held courses with U.S. Wheat Associates and Purdue University Food Science Department Chair Senay Simsek, who worked in NDSU's Plant Sciences

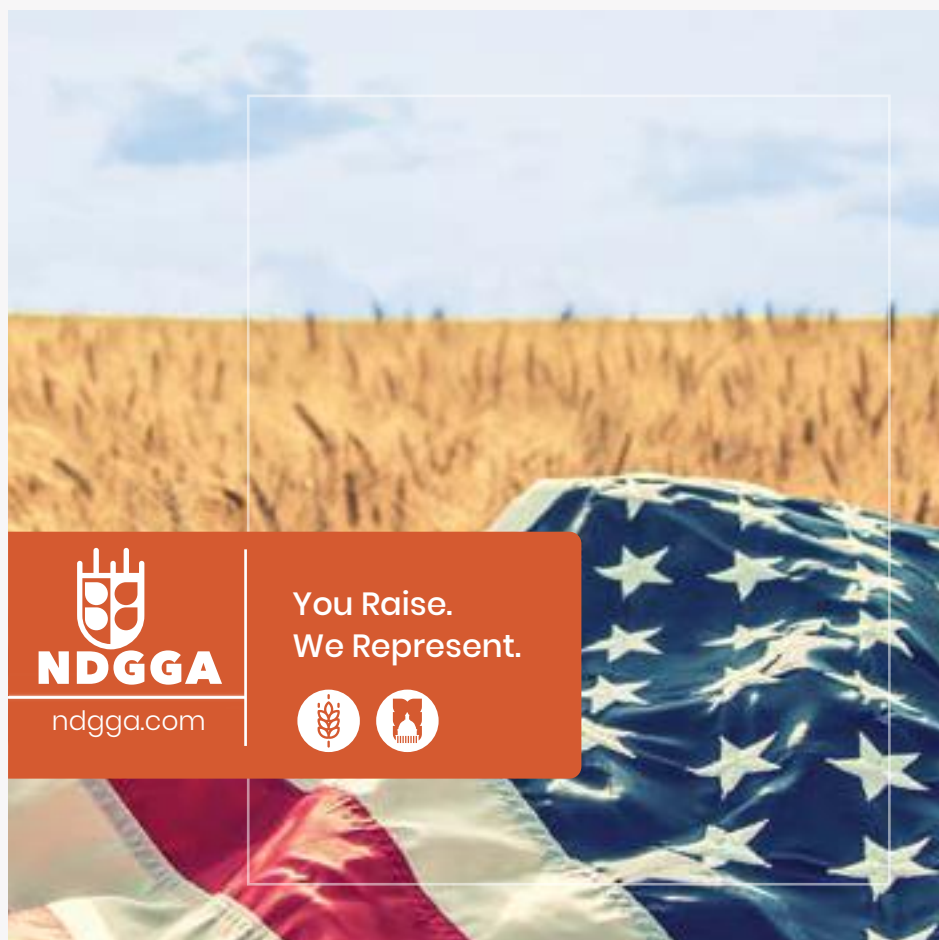
Department for more than 15 years.

For the initial courses, Simsek consulted a massive 1,500-page tome, which NCI helped pare down to a more-digestible 150 pages for publication.

"Whether you're sitting in a flour mill in the U.S. or somewhere overseas, you should be able to understand it," Jirik said. "There's a lot to know about wheat quality."

The Wheat Quality Handbook was released in March and is available for purchase at NCI's website. It covers wheat structure, wheat quality tests, wheat classes and future trends and tells the story of how a wheat kernel starts in the field and ends on the table.

"This book is an excellent resource for those in the grain industry to understand better the wide range of topics associated with wheat chemistry and wheat quality," NCI Program Specialist Krista Jansen said. 🌾



2023 Impact Analysis

Northern Crops Institute (NCI) is an effort to support the promotion and market development of crops grown in North Dakota, Minnesota, Montana, and South Dakota. NCI is an international meeting and learning center that brings together customers, commodity traders, technical experts, and processors for discussion, education, and technical services. Situated in Fargo, North Dakota, USA, this unique facility is only minutes from the farm fields that yield much of the world's food.

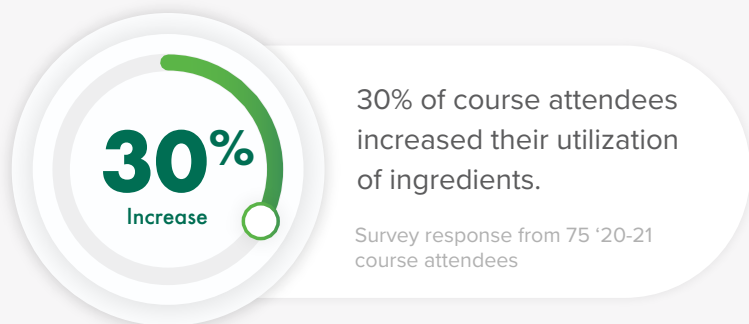
Course Impact

The Northern Crops Institute offers a variety of courses, webinars, and handbooks that unite customers, commodity traders, technical experts, and professors for discussion and education. During our courses, participants can expect to refresh their expertise and be exposed to existing and new technology, participate in lectures, case histories, laboratory demonstrations and tours and hear from industry experts, government officials and university professors.



● - Yes ● - No Survey response from 75 '20-21 course attendees

As a result of your experience with NCI



“
NCI's competency in providing relative courses is the benchmark. They have the best people and facilities that are reliable and can easily adapt to the course participants.
 ”

Technical Impact

NCI has a technical staff comprised of highly experienced food scientists, processing technologists, and project managers. NCI has the experience and resources to bring your vision to life; from start to finish we partner with clients through the process, creating a concise and clear experience to help scale-up your product development.

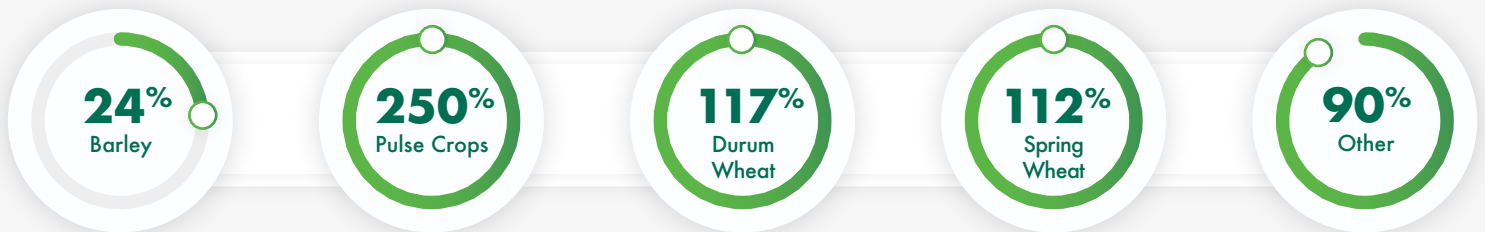
“

Sourcing commodities and ingredients becomes more effective with in depth understanding of crops quality and supply chain and it's challenges”

”

– Technical Service Client

As a result of your experience with NCI, how much has your utilization of the following ingredients net increased over the past 2 years?



Survey response from 19 technical service clients from the '20-21 calendar year

Overall Investments

Our research shows that clients have increased their overall investment activity by 16% within ND, MN, MT, and SD after their experience working with NCI.

Survey response from 19 technical service clients from the '20-21 calendar year

24% Net Increase

Working with NCI has allowed us to:

“ Have confidence to invest in larger scale crop production and in larger scale crushing and extrusion. ”

“ Expand our product offerings. ”

“ Explore valued added opportunities with customers. ”

“ Run small trials and preliminary studies on different concepts before we scale up the products and processes. ”

“ Start a business. ”

Survey conducted by Prime46

INNOVATION EVOLUTION

Century's worth of data shows modern wheat varieties are a productivity and biodiversity win-win

Courtesy of the University of Minnesota

Agriculture is seen as both a key cause of the global biodiversity crisis and a principal means of addressing it. Though some advocates are calling for farmers to return to heirloom varieties of crops as a way for the agriculture industry to address the growing challenges posed by climate change, new research from the University of Minnesota suggests that the solution lies primarily in modern scientifically bred crop varieties, which have led to an increase in biodiverse cropping practices and significantly higher wheat yields in the U.S.

In a paper recently published in the Proceedings of the National Academy of Sciences, researchers from the University's GEMS Informatics Center, Department of Applied Economics, and the Minnesota Supercomputing Institute assembled area data and the associated genetic pedigrees for the 1,353 commercial wheat varieties that made up most of the U.S. crop from 1919 to 2019. They factored in phylogenetic breadth when estimating both the spatial and temporal diversity of commercial wheat varieties found in fields, and tracked how that breadth changed over time across the country.

"Many perceive that science has led to cropping systems that are less biodiverse. We set out to see if that was indeed the case using newly developed, long-run data for a scientifically intensive cropping landscape," said Philip Pardey, a professor in the Department of Applied Economics.

Research findings

The increasingly intensive use of scientifically selected crop varieties has led to more, not less, biodiverse cropping practices, at least regarding diversity in the U.S. wheat crop.

This substantial increase in varietal diversity over the past century has been achieved in tandem with a fourfold increase in U.S. average wheat yields.

"The increasing number of locally adapted varieties and faster turnover of newer varieties grown by wheat farmers in the U.S. demonstrated a success story of modern agriculture achieved by farmers and breeders," said lead author Yuan Chai, a researcher at GEMS Informatics Center.

Agriculture is being asked to address an increasingly large number of sustainable development challenges. In addition to the long-standing role of crop productivity improvement to alleviate

poverty and improve food security, ever-more sustainable cropping systems are required to address the growing challenges posed by climate change, land and water scarcity, and new pest and disease threats.

"The push for farmers en masse to return to heirloom varieties or landraces is not a sustainable solution," said Kevin Silverstein, scientific lead at the Supercoming Institute. "Innovation in scientifically bred varieties is enabling us to feed more people on less land, fertilizer and water while improving overall crop diversity."

However, public investment in crop breeding research is now on the decline in the U.S., and falls chronically short in many other countries, especially lower-income countries. Building meaningful climate and pest resilience into the world's food crops in ways that also achieve global food security goals requires doubling down on crop improvement research that enhances not undermines crop biodiversity.

Some of the analytic tools developed by the GEMS Informatics Center to examine this research are being further developed to enable other investigations of the changing crop diversity landscape in other crops and other countries.



The National Wheat Yield Contest now open for 2023 entries

By Prairie Grains Magazine Staff

The National Wheat Yield Contest (NWYC) is accepting entries for 2023. Farmers growing winter, spring, irrigated or dryland wheat are encouraged to get their entries in now. There are several changes to this year's contest rules. There is now only one deadline and one price for entries per growing season. Winter wheat entries are due May 15, 2023, and spring wheat entries are due Aug. 1, 2023.

Each entry will cost \$100. There are many partners with entry vouchers that contestants are encouraged to use. On the entry form, contestants will select the voucher they are applying to use for their entry payment. Contestants are encouraged to enter early and plan what management techniques they will adopt to reach their top yield potential. The wheat yield contest encourages contestants to strive for high yield, quality and profit. Each contestant must save an 8 lb. sample of their wheat and the 24 national winners will send their samples in for analysis of baking and milling characteristics. Additionally, there is a test weight requirement for eligibility to win the national contest. Depending on class, wheat must exceed 57 or 58 lb. test weight to compete.

"Growers who are shooting for high yields, select a good variety and provide the crop with proper management for their yield level usually end up with high quality wheat. Our quality testing over the past couple of years has proven this," said Anne

Osborne, director of the contest.

Partners in the NWYC provide financial resources and much more. The partners help their customers maximize their yield, quality and profit. They help the growers enter the contest and recommend when and which acres of the field they should submit. The NWYC is only possible because of partnership with these important contributors, including Prairie Grains Magazine supporters WestBred, U.S. Wheat Associates, and Northern Crops Institute.

National winners will receive a trip to the 2024 Commodity Classic in Houston, Tex. They are invited to the winners' reception along with their families, seed suppliers and agronomists. Quality winners will be recognized per class and have the opportunity to earn an extra cash award.

In 2022, three contest entries binned more than 200 bushels per acre (bpa). Idaho farmer Rylee Reynolds noticed top yield honors with a 231.37 bpa of irrigated soft white winter wheat – besting the previous contest record of 211.59 bpa in 2019. Minnesota farmer Matthew Krueger placed second (113.51 bpa) in the Spring Wheat-Dryland category. North Dakota farmer Jon Wert finished third (108.05 bpa) by planting the MN-Torgy variety.

The National Wheat Yield Contest is a program of the National Wheat Foundation. To learn more about the contest and to enter, visit www.yieldcontest.wheatfoundation.org.

GAME OF SOY!

2023 MSR&PC Election Edition

GAME OF SOY!

FARMER



CHECKOFF CHAMPION

You're a proud Minnesota farmer. You rise each morning to help feed and fuel communities here at home, across the country and around the world. As a producer, you also pay one-half of one percent of every bushel of soybeans into the federally mandated soybean checkoff program. In turn, the Minnesota Soybean Research & Promotion Council and United Soybean Board invest your hard-earned checkoff resources into research, finding new markets and increasing demand and value for your crop. For every dollar you put into the checkoff, you earn about \$12 in return value. Keep on growing!

GAME of SOY!

All Minnesota soybean farmers pay into the checkoff, which means you also have a say in who's tasked with directing your checkoff funds. The Minnesota Soybean Research & Promotion Council is holding its annual election this spring. Minnesota Department of Agriculture (MDA) will mail ballots **March 17** to farmers who have voted in past MSR&PC elections or who requested a ballot. Ballots are due back to MDA by Tuesday, **April 4**. Sorry, ballots postmarked after April 4 won't be accepted.

GAME of SOY!

Checkoff projects are long-term investments, but they share a common mission: improving farmer profitability. The proof is in the details: The soybean industry's economic impact totals \$115.8 billion, and the checkoff has helped bring more than 1,000 soy-based products to the marketplace.

GAME of SOY!

The elected board of soybean-producing directors are dedicated to maximizing and investing checkoff dollars for the prosperity of all soybean farm families. Council directors – 15 in total – are elected from every district of Minnesota to ensure the state's diverse range of soybean farmers have an equal voice. The Council also supports four directors on the United Soybean Board, which directs the national soybean checkoff program.

GAME of SOY!

The Council's award-winning Annual Report is always a fun and educational read. Check out the 2022 edition by scanning the QR code below to play the Game of Soy.



mnsoybean.org 

EASING CONGESTION

Ocean freight rates revert to pandemic lows

By USW Market Analyst Tylor Ledford

As the COVID-19 pandemic fades into a not-so-distant memory, one can remember a time when “supply chain disruptions” made every headline and container backlog in the Port of Long Beach required direct intervention from the U.S. government. Since the highs hit in the fall of 2021, freight prices have dropped to lows not seen since June 2020. Coupled with a recent break in wheat prices, decreased ocean freight costs have helped turn the tides back in the importers’ favor. In early February, the Baltic Dry Index hit 621, a level not seen since June 2020. The index has

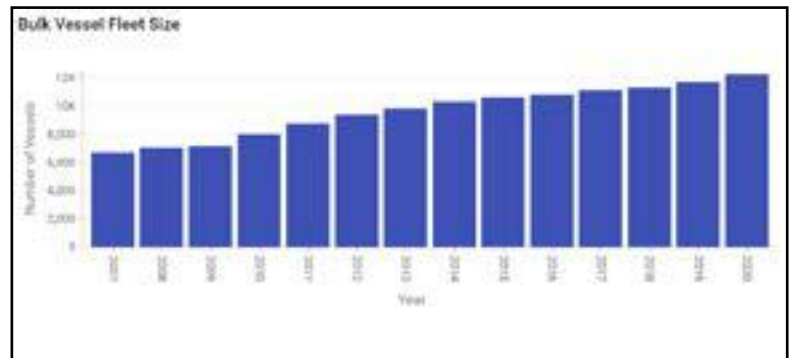
fallen 88% from its peak in October 2021. “The current outlook is not bullish, but vessel owners believe things must go up, as they don’t believe they can go lower,” said Jay O’Neil of HJ O’Neil Commodity Consulting.

The China effect

In recent years, dry bulk freight and Chinese economic growth have become interconnected. Dry bulk vessel sizes known as Handy (25,000 to 39,000 deadweight tons (dwt)), Handymax (40,000 to 49,999 dwt), and Panamax (60,000 – 78,999 dwt) that carry wheat and other grain cargos are also used to ship

iron ore. And, according to S&P Global Commodity Insights, China accounts for almost 60% of dry bulk demand to help supply the country with over 1.1 billion metric tons (MT) of iron ore.

Until recently, however, China’s “Zero Covid” policy severely impacted economic growth. In 2022, China’s GDP growth slowed to 2.8% from 8.1% in 2021, thus diminishing iron ore demand by 2% as steelmaking slowed. With decreased Chinese vessel demand, freight rates have plummeted. As the seasonal lulls in economic activity around the Chinese Lunar New Year holiday dissipate, China remains a wildcard in



The bulk vessel fleet size grew by 53.8% on a steady pace over the last decade. Source: Drewry Shipping Consultants Ltd.



global shipping as the country relaxes its COVID-19 restrictions, potentially opening the door for accelerating growth and industrial activity.

Congestion

According to Lloyd's List, in the fall of 2021, 5.7% of the world's bulk fleet was anchored off Chinese ports due to strict quarantine requirements. As the global economy started its recovery from the pandemic, immense port congestion tied up hundreds of vessels, sending dry bulk freight soaring. Easing congestion in Chinese ports is expanding dry bulk capacity and will continue to play an essential role in freight markets in 2023, especially as China lifts more COVID-related restrictions.

Vessel supply and demand

Over the last 13 years, the dry bulk vessel fleet has increased steadily, marking an average yearly increase of 4.8%, total growth of 53.8% since

2010. In 2022 dry bulk fleet growth slowed to 2.8% and is forecast to slow to 2.3% in 2023 (S&P Global, HJ O'Neil Commodity Consulting). Meanwhile, dry bulk demand declined by 1.9% in 2022 due to low iron ore and reduced grain shipments. If vessel supply continues to outpace demand, the downward pressure will continue to impact ocean freight.

Bar chart showing a 53% increase in the global dry bulk vessel fleet from 2007 to 2020 to show the effect on freight rates.

The bulk vessel fleet size had grown by 53.8% on a steady pace over the last decade. Source: Drewry Shipping Consultants Ltd.

Oil prices

After Russia's invasion of Ukraine in February 2022, oil prices skyrocketed as sanctions were placed against Russia, the world's second largest oil producer. As oil prices increase, the fuel input cost for

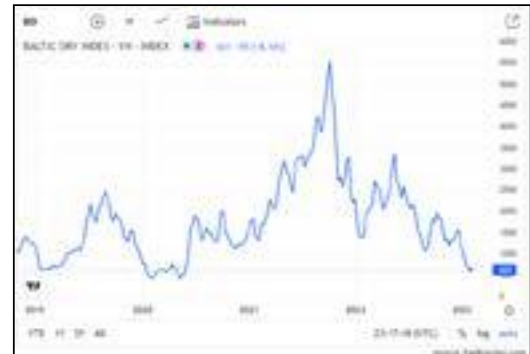
dry bulk vessels also increase, supporting freight prices. In the year since the invasion, oil prices have normalized, taking pressure off the market.

Will this pattern hold?

As the freight market continues in freefall, importers and exporters must ask if this pattern is sustainable. According to Breakwave Advisors "one of the slowest weeks of the year for Chinese activity is now behind us" as we move closer to spring and past the Lunar New Year festivities. Vessel supply and demand, port congestion, oil prices and the on-going supply chain disruptions will continue to impact the market as economies normalize post-COVID; however, China remains in the driver's seat of global freight. The resilience of the Chinese economy will be put to the test as economic activity increases post COVID, but for now, the world is waiting and all eyes are on China. 🌾



Port congestion in China supported the bulk carrier rates in 2021, with upwards of 600 vessels queued to load or discharge cargo. Source: Lloyds List Maritime Intelligence.



In February, the Baltic Dry Index hit 621, a level not seen since June 2020. The index has fallen 88% from its peak in October 2021. Source: Tradingview.com.



ACROSS THE PRAIRIE

By Prairie Grains Magazine staff

MDA accepting applications for noxious weeds/invasive plants grants

The Minnesota Department of Agriculture (MDA) is now accepting applications for the 2023 Noxious Weed and Invasive Plant Grant. Counties, municipalities, tribal governments and weed management entities (including weed management areas) may apply for grants to mitigate noxious weeds around Minnesota. To be eligible, applicants must spend grant funds by June 30, 2023.

Since 2018, MDA's Noxious Weed and Invasive Plant Grant has awarded over \$1.3 million to fund a variety of activities such as purchasing equipment and supplies, conducting mapping and outreach activities and hiring private applicators to manage noxious weeds. MDA has awarded 119 grants, averaging \$9,000.



Palmer amaranth, seen here, was first discovered in Minnesota in 2016 and is one of the invasive species that the Minnesota Department of Agriculture invests resources into combating.

Review the application requirements and find the application on MDA's website. Applications are due on March 31, 2023. Questions can be directed to MDA Noxious Weed Law Coordinator Emile Justen at Emilie.Justen@state.mn.us.

SDSU launching Ag Economic Dialogues series

Ag Economic Dialogues was created to assist farmers and

ranchers in making the best and most profitable decisions for their operations. Each month, several topics will be covered during a free, one-hour webinar, which begins at 10:00 a.m. CST. Producers can engage with experts from the comfort and convenience of their own chair, tractor or combine.

Online registration is required so participants can receive the link to join the Zoom meeting. Visit www.extension.sdstate.edu/ to register.

Montana Grain groups announce scholarship program

The Montana Grain Growers Association (MGGA) and the Montana Grains Foundation (MGF) will each offer scholarships to be used for the 2023-2024 school year.

MGGA will award two \$1,000 scholarships to students pursuing an agricultural related degree at the college of their choice. Applicants or their parent, grandparent or legal guardian must be a current producer member of MGGA.

MGF will award two \$2,500 scholarships to Montana State University juniors or seniors pursuing a degree in Ag Business, Ag Education, Plant Science or Environment Sciences (apply through MSU), and two \$2,500 scholarships to MSU graduate students. Applications must be received no later than April 1, 2023, and the winners will be announced by May 1.

More information and application forms are available by calling the MGGA office at 406-761-4596 or online at www.mgga.org.

Ag Innovation Campus sets 2023 production date

Phase 1 of the Ag Innovation Campus in Crookston, Minn., is nearing completion. The operations are slated to begin this spring to early summer, with crushing slated for later in the summer. Phase 1 of the project showcases several windows along the western wall of the facility. In its current form, the windows allow for natural lighting in the building. As the project moves into Phases 2 and 3, the windows will give visitors access to the crush facility via The Crushwalk, without having to step inside the crush plant.

The Campus will be home to a specialty crushing facility, allowing entrepreneurs from universities and private

businesses, private seed developers and processing companies access to affordable processing, designed to lower costs while promoting growth of value-added products.

NAWG Responds to WOTUS announcement

In late 2022, the U.S. EPA and the U.S. Army Corps of Engineers announced the final “Revised Definition of Waters of the United States.” The rule takes 60 days after it is published in the Federal Register.

“The National Association of Wheat Growers (NAWG) is deeply concerned that the EPA and U.S. Army Corps rushed to get this revised definition out prior to the end of the year instead of waiting for the decision in the Sackett case before the Supreme Court,” NAWG CEO Chandler Goule said. “While we continue reviewing the final rule, since the rulemaking process was announced, NAWG has stressed that farmers need clarity regarding jurisdiction, recognize important agricultural water features, and more long-term certainty from the courts and administrations.”

In April 2022, NAWG filed an amicus brief with other agriculture groups in the Supreme Court case, which is examining the scope of federal jurisdiction as a Water of the United States under the Clean Water Act.

US farm exports set another record in 2022

The American agricultural sector posted its best export year ever in 2022 with international sales of U.S. farm and food products reaching \$196 billion. Final 2022 trade data released earlier this week by the Commerce Department shows that U.S. agricultural exports increased 11 percent, or \$19.5 billion, from the previous record set in 2021.

The top commodities exported by the United States in 2022 were soybeans, corn, beef, dairy, cotton and tree nuts, which together comprised more than half of U.S. agricultural export value. International sales of many U.S. products – including soybeans, cotton, dairy, beef, ethanol, poultry, soybean meal, distilled spirits and distillers’ grains – reached record values.

Outside the Prairie: UK farmer sets Guinness World Record wheat and barley yields

In 2022, United Kingdom grain grower Tim Lamyman, who farms 600 hectares in the county of Lincolnshire, reported a wheat yield of 17.96 metric tons (MT)/hectare (267 bu/acre), beating the previous record of 17.40 MT (259 bu/acre) from New Zealand farmer Eric Watson in 2020. He also registered a barley yield of 16.21 MT (310 bu/acre) to the hectare, beating his own world record by two metric tons. 🌾

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