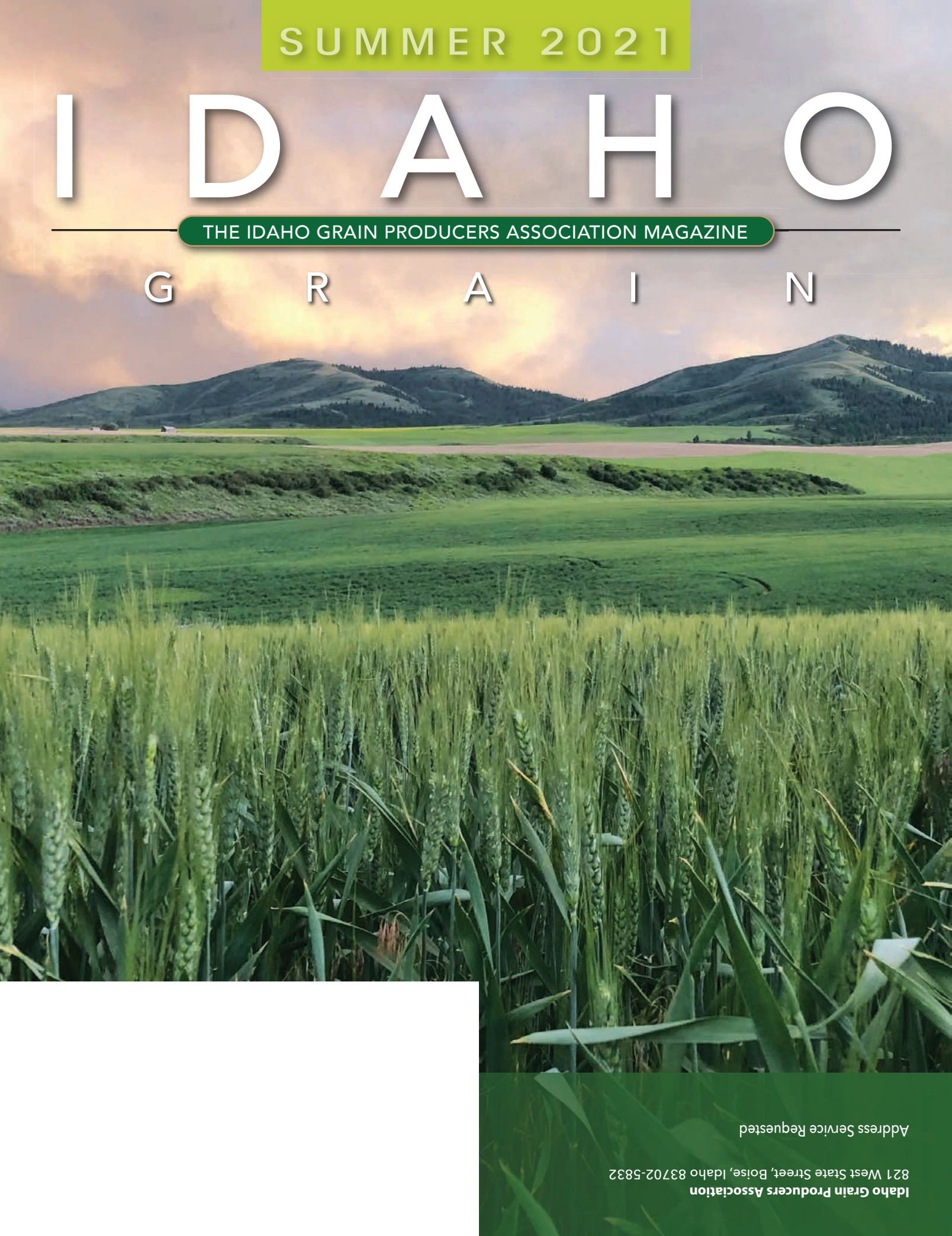


SUMMER 2021

# IDAHO

THE IDAHO GRAIN PRODUCERS ASSOCIATION MAGAZINE

# GRAIN



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# VIEWS



BY JAMIE KRESS  
**PRESIDENT**

It was nearly 10:00 o'clock last Saturday night and the end of what had been a very long week. We had finished planting a farm and were in the process of moving equipment back home. On our last trip, rather than put our teenage son in something he could easily drive, my husband Cory decided to have Tyson drive the fertilizer company's tender, which was significantly in need of maintenance. What could have been a 10-minute drive home became 30 minutes as Tyson figured out the transmission, battled bad brakes, and worked to keep the swaying truck under control on the loose gravel road.



As I watched from a pickup behind the parade of trucks, I was impressed that a tired dad would take the time to teach his boy how to drive a difficult truck. There were certainly quicker ways to get that tender home, but Cory realized the invested time would be worthwhile. Teaching a child needed farm skills is a lot like serving in the ag industry – **it's not always convenient or easy, but it is important.**

Advocating for the needs of the American Farmer is nothing new. However, as time moves forward the number of people with a connection to agriculture and rural America is dwindling. Less of the general public understands and appreciates what goes into the production of food. We also face the challenge in Washington DC, and increasingly in Boise, of educating law makers- helping them understand what modern agriculture and rural America look like; helping them understand what the family farm is all about.

It seems to me that over the last year, the intensity and frequency of agriculture related concerns has picked up. From the threat to our

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Jamie Kress,  
Rockland

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Snake River Dams, to proposed plans like 30x30 and the STEP Act that have the potential to forever change the farming landscape. There's ongoing discussion about climate change, carbon taxes, and carbon banks. Attacks on pesticides are relentless. Then, of course, we have a Farm Bill that will start taking shape this coming summer. And these are only just a handful of federal concerns, let alone concerns on the state and local levels.



We can't avoid change and shouldn't fear it – but we have to understand that by not speaking up and participating in the process we will likely be a casualty of it. Around IGPA, we like to say if you aren't “at the table, you're on the table.”

Sometimes when discussing participation or leadership opportunities in various organizations I hear farmers say, “I don't have time, I'm not into politics, I'm not a leader, my voice doesn't matter, I've already done my part.” To be fair, I'm sure we have all felt some of these sentiments. However, my answer to these concerns is: no farmer has “extra time,” leadership skills can be developed, and your voice and experience does matter. You are the American Farmer – there is no one better or more qualified to do this work.

In our last Idaho Grain magazine, I reflected on the work of those who came before – the agricultural pioneers of our Idaho farms. Over 100 years later the fruits of their labor are still manifest from the Palouse to the Snake River Plain. While we hold appreciation for those who have contributed to our lives, perhaps we should remember that we too are part of this story – it's far from over. It is our turn to step up and contribute like our forefathers did. They shaped the literal landscape; our work is to shape the social and political landscape so that we too can ensure success for future generations.

Maya Angelou said it well: “When you get; give. When you learn, teach.” Using our unique talents and perspectives, we can find ourselves mentoring a young farmer, serving in our communities and/or agricultural organizations and boards, or speaking out against ideas or policy that seek to destroy our way of life. The opportunities to serve and contribute are endless. For some of us, it might be a little uncomfortable at first. For most of us, **it won't always be convenient or easy – but it's important.** ■

# EDITOR'S NOTE



BY STACEY KATSEANES SATTERLEE  
**EXECUTIVE DIRECTOR**

It is looking (and some days feeling) a lot like spring here in the Treasure Valley, with summer quickly on the way. And things are feeling more “normal” as spring progresses – school is busy as the end of the year approaches, and spring sports are well underway (which has me, my husband, and my kids running multiple directions most nights of the week, including weekends).

It was a doozy of a legislative session - and running a total of 117 days, was one of the longest in history. Now that it has wrapped up, we can shift our focus. IGPA has some exciting things coming up this summer – starting with the Big Dam Meeting, our first-ever June board meeting in McCall. As you might guess from the title, the focus of the meeting is the importance of the Columbia-Snake River System to Idaho’s grain industry. We have two information-packed days planned with two headline speakers – first, Congressman Mike Simpson will talk about his proposal, the Northwest in Transition, that includes breaching the four lower Snake dams. Second, Idaho Governor Brad Little will address the group. The dams on the river are critical to PNW grain growers, so we are looking forward to receiving timely information and engaging in lively discussion.

Next up in June, we have a Big Dam Tour – working with Idaho Farm Bureau Federation and our counterparts in Oregon, Washington, and Montana, we’re planning a meeting and tour with CEOs and Presidents from national organizations, like National Association of Wheat Growers CEO Chandler Goule, American Farm Bureau Federation President Zippy Duvall, National Council of Farmer Cooperatives CEO Chuck Conner, National Grain and Feed Association CEO Mike Seyfert, U.S. Wheat Associates President Vince Peterson, and others – all

to educate them about how critical the Columbia-Snake River System is to the Pacific Northwest. We will be hosting a meet and greet dinner with growers the night of June 16, so if you are in the Lewiston area, check your mailbox for an invitation as we get closer.

All of this in addition to our usual June meeting schedule of setting IGPA’s budget for the next fiscal year, the Idaho Wheat Commission budget meeting, the Idaho Barley Commission budget meeting, National Barley Growers Association summer meeting, and the return of University of Idaho field days.

We have the second installment of an infographic about issues that impact salmon and steelhead in Idaho on page 22. Also, learn more about just how efficient barging grain on the river system is on page 26. IGPA has some amazing farmer leaders serving on the executive board – get to know two of them better on pages 15 and 18, along with Senator Carl Crabtree from Grangeville on page 14.

On a personal note, we moved my grandma into an assisted living facility last week. All my life, my grandparents have lived in the white house just past the river in Blackfoot. My grandpa died a few years ago, and my grandma (who recently turned 90) decided she was ready – but this is a big change for all of us. I went to visit her last week at her new place, and something she said stuck with me: when you get to be her age, you spend a lot of time thinking back over memories – and she’s lucky to have so many good ones. It was an excellent reminder to get out and make a summer’s worth of good memories with your people – I know I’m excited to. ■



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## The Nez Perce Snake River Water Rights Agreement and Idaho Agriculture

BY THE IDAHO GRAIN PRODUCERS ASSOCIATION, THE IDAHO FARM BUREAU FEDERATION, AND THE IDAHO WATER USERS ASSOCIATION

In a recent release, Congressman Mike Simpson referred to the dire circumstances that water users are facing in the Klamath Basin for the upcoming irrigation season. He indicated that part of the reason the water supplies will be so stressed is because “decisions were made to use the limited water to assist the endangered species” (i.e. to help fish). He then poses the following question: *What I am asking of all Idaho agriculture, including the Idaho Grain Producers, the Idaho Farm Bureau and the Idaho Water Users – do you want to talk about ways we can keep Idaho water in Idaho, for our irrigators, for our recharge and for our fish?* This question has already been answered in Idaho.

In 2001, agriculture in the Klamath Basin was dried up when water was taken from water users to assist endangered fish in the basin. This was a very difficult time for agriculture in the Klamath Basin.

Idaho water users saw what happened in the Klamath Basin at that time and took great effort to ensure that it would not happen in Idaho. Stakeholders, including Idaho’s political leadership, worked to negotiate the Nez Perce Snake River Water Rights Agreement, which was approved by Congress in 2004, despite opposition by certain environmental groups.

Three important things happened because of the agreement. First, tribal water rights were identified and decreed in Idaho’s adjudication court.

Second, a 30-year Upper Snake Biological Opinion was issued on the operations of the Snake River above the Hells Canyon Complex. This biological opinion confirmed that the actions identified, including those outlined in the agreement would not jeopardize the continued existence of the salmon. Importantly,

when the biological opinion was challenged by environmental groups, the State of Idaho, United States, Idaho water users, and Nez Perce Tribe all defended the agreement in federal court. That challenge was ultimately dismissed – effectively ending the salmon wars as to Idaho water.

Third, the agreement provides for a limited level of flow augmentation from willing sellers, pursuant to Idaho law, with local control. Although it is a sacrifice to provide water for flow augmentation, no acres have been forced to dry up as a result of the flow augmentation program.

After 17 years, the agreement is working. It protects Idaho water through 2034 – and may be extended until 2064. Idaho is not like the Klamath Basin. There is no Endangered Species Act “jeopardy determination” on the Upper Snake River, tribal water rights have been settled and Idaho’s federal dams have locked-in protection through the biological opinion. In short, water cannot be taken from Idaho irrigators.


After 17 years, the agreement is working. It protects Idaho water through 2034 – and may be extended until 2064. Idaho is not like the Klamath Basin. There is no Endangered Species Act “jeopardy determination” on the Upper Snake River, tribal water rights have been settled and Idaho’s federal dams have locked-in protection through the biological opinion.

Finally, let’s clarify the difference between “flow augmentation” and “spill” – these are two distinct river management operations that seem to have been conflated. Flow augmentation is additional water that is sent down river to aid in salmon migration. Generally, this water purportedly will (1) increase the speed of the water flowing in the river; and/or (2) reduce the temperature of the water. Over the past 25 years,

as stated above, there have been efforts to increase flow augmentation on the Lower Snake River (i.e. take more of Idaho’s water), yet, each effort has consistently been defeated. In fact, even the so-called salmon judge, Judge Redden, found that the science does not support flow augmentation.

Alternatively, spill refers to how water is managed at the physical dam structures. As water approaches the dams, it may take one of multiple paths. For example, the water can flow through the turbines, thus generating additional electricity. Alternatively, dam operators can open the gates and water can “spill” over the spillways. Under the Flexible Spill Agreement, entered into by various states, tribes and stakeholders in the region, additional water is spilled over the Columbia and Snake River dams in an effort to reduce the time it takes for juvenile salmon and steelhead to migrate to the ocean. Spilling water at a dam is a balance with power generation. More water spilled equals less power generated. Importantly, although increased spill may impact Idaho ratepayers who rely on the hydropower generated at the dams, increased spill does not equate to a demand for additional water (i.e. flow augmentation) from Idaho. Put simply, spill and flow augmentation are different operational considerations.



In sum, Idaho’s water is not at immediate risk of being taken away from Idaho irrigators. We have worked hard to ensure that Idaho does not become the next Klamath Basin. Any suggestion to the contrary is simply wrong. 



# Idaho Has a Bright Future Ahead

BY GOVERNOR BRAD LITTLE



Idaho has a proud history and bright future ahead.

We have the strongest economy in the nation. We have one of the best employment rates in the country. Our schools and businesses were open longer than almost every other state during the pandemic, and we added thousands of employers during

2020, blowing previous years out of the water.

Idaho also has the most financially solvent state budget. Quick action during the darkest months of our pandemic fight, combined with years of fiscal conservatism, resulted in a record budget surplus.

Consider other states. Instead of taking steps to give money back to citizens through tax relief, other states are considering tax increases to handle the 20- to 40-percent budget cuts they face because they haven’t managed their economy and state budgets as well as Idaho.

Despite this legislative session’s long duration and a lot of political distractions, we were successful in providing citizens with historic tax relief and make strategic investments where they count. My plan for Idaho’s record budget surplus was called “Building Idaho’s Future,” and I appreciate my legislative partners for supporting it.

We were able to give \$435 million back to Idahoans through tax relief – among the single largest tax cuts in Idaho history. These tax cuts will boost your prosperity while keeping our tax rates competitive and our business climate vibrant.

We also secured major investments in our roads to help boost Idaho agriculture and preserve one of your most precious commodities: your time. Our state’s transportation system needs are a growing problem that steals Idahoans’ time and threatens their safety and our economic prosperity. We put \$126 million in one-time money toward shovel-ready transportation projects, and I secured legislative support for an \$80

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million in a new ongoing, sustainable transportation funding solution so we can keep up with Idaho’s unprecedented growth.

In addition, my plan supported major water infrastructure projects. There is nothing more essential to our health and way of life – or Idaho’s future – than clean, plentiful water. Idaho’s abundant agricultural landscape supports tens of thousands of Idahoans and their livelihoods. Across Idaho, water is the building block for careers and prosperity. Investments in cleaner, more efficient water systems for rural communities and the agriculture industry across Idaho means rural Idaho will remain a strong part of our heritage and economy for generations to come.

We also put millions more toward broadband infrastructure, to better connect Idaho and improve commerce, economic growth, and education – on top of close to \$50 million we made available for broadband improvements last year.

We also put more toward literacy, to help close achievement gaps that widened for some students during the pandemic, along with investments in higher education and career technical education training programs across Idaho.

And we invested in the items necessary to support frontline personnel at the Idaho State Police. While other states seek to defund the police, I am proud to say Idaho “Backs the Blue.”

My “no frills” budget for the new fiscal year leaves a prudent surplus, bolsters rainy-day funds, and reflects my continued priority on education, including our valuable teachers. My budget was among the most conservative in years.

A strong future for Idaho – and especially Idaho agriculture – also requires the continuation of our integrated system of dams throughout the region. My position on the lower Snake River Dams has not changed. I remain unconvinced that breaching the dams is a silver bullet for salmon recovery, and breaching the dams would have devastating impacts on Idahoans and vital segments of Idaho’s economy.

We must continue to find creative, consensus-based solutions that help salmon thrive and foster a strong Idaho economy. Last year, I signed an agreement with the Governors of Washington, Oregon, and Montana, stating Idaho’s commitment to working



collaboratively on a regional level to advance our shared goal of successful salmon recovery and economic prosperity. I am also proud of the work of my Salmon Workgroup – a diverse group of stakeholders that worked for 20 months to come up with dozens of pragmatic recommendations that promote healthy salmon populations and thriving river communities in Idaho. It was the first time that broad interests worked collaboratively to help shape Idaho’s policy on salmon and steelhead. While a lot remains to be done, I am confident we are moving in the right direction.

I am committed to continuing to work with local and regional stakeholders and the entire Idaho congressional delegation to improve salmon returns and ensure Idaho industries not only remain whole but are better positioned for the future.

Given all our success and the bright future ahead of us, aren’t you glad to live in Idaho? ■





# Growing A Sustainable Future for Soil Health

BY NEIL CRESCENTI, AGRICULTURE PROGRAM MANAGER, THE NATURE CONSERVANCY



Agriculture has been at the heart of Idaho's economy and cultural heritage for generations. Our farmlands produce food, support local economies and provide some of Idaho's most beautiful landscapes. Underlying all of this

is one of our most valuable natural resources—soil. Soil health has gained momentum in recent years, and for good reason. Healthy soils lead to productive crops, improved water supplies, cleaner water, carbon storage and reduced production costs. These positive benefits for both people and nature are why The Nature Conservancy's Healthy Soils, Clean Water program engages and supports farmers in adopting soil health practices.

The Nature Conservancy (TNC) has been working with Idaho's agriculture producers for over 55 years. Together, we've worked to tackle some of the state's most pressing issues including water quality, water supply and soil erosion. As climate variability continues to impact our communities and environment, TNC is scaling up our work with the agriculture community to match the scale of the challenges—and opportunities—at hand.

Building soil health requires a systems approach to farming that incorporates a set of principles often referred to as regenerative agriculture, which includes: minimizing tillage, maintaining continuous soil coverage, diversifying crop rotation and making strategic soil fertility management decisions. Adopting practices such as no-till and cover cropping can reduce production costs like fuel and fertilizer, while maintaining or improving yields.

Yet despite the potential economic and environmental benefits of regenerative agriculture, there are real barriers to adopting soil health practices, from the financial risk of shifting production systems to simply not knowing where to start.

That's why TNC is partnering with farmers on efforts like our demonstration farm projects to help mitigate risks so that more Idaho producers can achieve improved soil health. Located just outside of Twin Falls, TNC's new 30-acre regenerative agriculture demonstration farm is a partnership with Todd Ballard



of Ballard farms. Todd began experimenting with soil health practices on his fields about eight years ago after conventional methods and gravity irrigation systems became increasingly expensive to maintain. He instead started planting cover crops and using minimum- or no-till practices that produced yields relatively even with conventional methods.

With the assistance of Brad Johnson, TNC's Agriculture Strategy Manager, Todd will build upon these techniques to test a variety of regenerative agriculture practices as he grows barley and sugar beets. Because regenerative agriculture practices are not one-size-fits-all, the demonstration farm will refine techniques that have seen success elsewhere in the country and adapt them to Magic Valley's climate and conditions, expanding what is possible for Idaho agriculture.

Over the next three years, TNC will offer farm tours and workshops for the Magic Valley agricultural community to share lessons learned and best practices, bringing together other resource partners including the USDA-NRCS, University of Idaho and Simplot. By demonstrating and sharing the benefits of regenerative agriculture for soil health, we can achieve positive outcomes and a sustainable future for Idaho's producers, communities and natural environment.

TNC looks forward to our continued partnership with farmers around the state and we invite you to reach out if you'd like to learn more about the demonstration farm tours or implementing soil health practices on your farm. You can contact me at [neil.crescenti@tnc.org](mailto:neil.crescenti@tnc.org). ■

# How Does NASS Produce Crop Reports?

BY RANDY WELK, IDAHO STATE STATISTICIAN, USDA NATIONAL AGRICULTURAL STATISTICS SERVICE

Recently an American Farm Bureau Federation USDA-NASS Working Group published a report. In the report the working group stated: *“The statistical reports prepared by NASS have sweeping impacts across the agriculture industry that go beyond the gathering of agricultural information. These reports are critical for decision-making by farmers, ranchers, agribusinesses, farm organizations, commodity groups, policymakers and other agricultural industry stakeholders. The weight these reports carry should not be discounted.”* The report called for NASS to “Increase Transparency with the Agricultural Community.” This article provides an overview of how the USDA’s National Agricultural Statistics Service (NASS) produces crop reports and is a first step at increased transparency.



Each year the USDA’s National Agricultural Statistics Service (NASS) publishes more than 400 national reports and hundreds of thousands of data items. The primary sources of information for NASS reports are those who know the most -- farmers and ranchers, livestock feeders, slaughterhouse managers, grain elevator operators, and other agribusinesses. Their cooperation is absolutely vital to a workable and meaningful estimating program.

The success of this cooperative relationship can be attributed to respondents’ recognition of the importance of the survey results and to the confidential treatment NASS accords all data on individual operations. Names, addresses and personal identifiers are never revealed. NASS survey and census data never leave NASS control. Only authorized persons working for NASS as employees or sworn partners, who are subject to fines and imprisonment for unauthorized disclosure, can access NASS data and only for approved statistical purposes.

NASS does not conduct surveys or provide data for private, proprietary purposes. When NASS collects data for others in a NASS-approved statistical study, farmers and ranchers will always be informed about the cooperating sponsor and participation will always be voluntary. Summary data from all NASS surveys and censuses are available to everyone, but NASS will never disclose any individual’s reported information.



Agricultural producers can sign up to be counted in future surveys and censuses at: <https://www.agcounts.usda.gov/static/get-counted.html>.

Crop Reports are based on data collected from a sample of a given population. The samples are designed so the chance, or probability, of including a particular operation in the sample is known before the survey is carried out. The sample data can be used to measure how much the survey estimates could differ from the population values. This measure of variability, due to selecting a sample rather than conducting a census is called the sampling error. The data from a probability-based sample can be used to make precise inferences about the population. The 2021 June Acreage report will be based on data collected from over 100,000 farms nationwide including just over 1,650 Idaho farms.

Samples for most surveys are drawn from a list consisting of the names, addresses, and telephone numbers of producers and agribusinesses, grouped by size and type of unit. NASS keeps the list as complete as possible, especially for the larger producers, by obtaining records for new or omitted operations from other USDA lists, producer association lists, and other sources.

NASS gathers survey information in a variety of ways: mail surveys, internet surveys, telephone interviews, face-to-face interviews, and field observations. Surveys can be completed online at: <https://www.agcounts.usda.gov/static/cawi/layouts/cawi/breeze/index.html>

After the data are collected, statisticians analyze the information to prepare estimates and forecasts. At NASS, an estimate is a determination of size or value and refers to what has already occurred, such as last year’s wheat harvest or cattle inventory. A forecast is an approximation of what may occur by the end of the



season, such as average wheat yield or total production for the current harvest year.

The crop estimating program reports on farmers' planting intentions, estimates of acreage actually planted and expected to be harvested, and forecasts of yield and production during the growing season. After the crops have been harvested, estimates of harvested acreage, yield, and production are made. During the marketing year, on- and off-farm stocks estimates are determined for the major crops. Each January, NASS publishes two reports summarizing production and values for major crops over the past 3 years. Through the mid-year and other quarterly probability surveys, information is collected on acreage, yield, production, and grain stocks on farms. Surveys conducted between quarters are used to gather information on crop conditions and yields; off-farm grain stocks are also measured.

Estimates are revised periodically to provide a better foundation for current and future estimates. Revisions are made when sufficient data become available to check the accuracy of the original estimates. Additional data about crops after harvest may mean production estimates have to be adjusted. Estimates are re-evaluated and revised to determine the most accurate benchmark against which to weigh current survey data: new data must be compared with accurate historical data to produce the most reliable estimates.

Continued on next page





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Continued from previous page

NASS uses FSA planted acreage data and remote sensing (satellite) data to supplement NASS survey data at specific times during the growing season to arrive at planted acreage estimates. It makes changes, if necessary, in October for corn, canola, and dry edible beans. Additionally, NASS considers these data in establishing the final end-of-season planted acreage estimates published in late September for the small grains and in January for the row crops, and as supplemental information in establishing county-level planted acreage estimates.

The Agricultural Statistics Board (ASB) prepares and disseminates hundreds of reports every year providing the official USDA estimates on crops, livestock, and economic indicators for the agricultural industry. The information released in NASS Crop Reports keeps market prices linked to unbiased supply and demand estimates. Shortly before a report is released, the Secretary of Agriculture (or a designated representative) enters Lockup to sign it, thereby certifying that these are official USDA statistics. After the report is signed, NASS experts brief the Secretary and other USDA officials on its contents. Since August 1, 2018, USDA has provided media the same access to the NASS and WAOB reports as the public, with the information becoming available to all at 12:00 p.m. (Eastern) on days the reports are released. The Agricultural Statistics Board Calendar is available in several forms on the NASS website at: [www.nass.usda.gov/Publications/](http://www.nass.usda.gov/Publications/).

Every NASS regional field office and headquarters unit employs strict security procedures when working on reports. Only authorized persons working for NASS as employees or sworn agents can access individual records—and only for official purposes. Everyone signs a confidentiality form pledging not to compromise reported information. Anyone who willfully discloses any identifiable information is subject to a jail term of up to five years, a fine of up to \$250,000, or both. Only staff working on a specific report have access to the data, and work areas are limited to employees involved in the report process. Staff who are not directly involved with a specific report are prohibited from accessing the data until after the report is released.

Market-sensitive ASB reports are compiled and issued under special security conditions known as Lockup. Lockup ensures that no information is released early to anyone. The process begins when NASS field offices



transmit the survey data they collected to headquarters through specially encoded equipment. The encoded data are saved on portable storage devices and locked in a safe; the files are immediately purged from the computer system. In the hours before a report is released, employees prepare the forecast or estimate in a secure locked area guarded by officers stationed in the hallways. Telephones are disconnected, cell phones must be left outside, vinyl shades with steel reinforcers are drawn over windows, and computer systems are secured against tampering.

Anyone entering the Lockup area prior to release of the report has neither Internet nor telephone access and may not leave or contact anyone outside the Lockup area until the report has been issued. Each year hundreds of guests visit the Lockup facility to tour the secured area and to learn more about the stringent security and report procedures of the ASB. A “Visitor Request Form” is available on the NASS website at: [www.nass.usda.gov/About\\_NASS/ASB\\_and\\_Lockup/](http://www.nass.usda.gov/About_NASS/ASB_and_Lockup/).

NASS reports are available electronically immediately after release via “Today’s Reports” on the NASS homepage at [www.nass.usda.gov](http://www.nass.usda.gov). E-mail subscriptions to NASS and World Agricultural Outlook Board (WAOB) periodicals are available free of charge. Each email provides a link to the publication and is generally delivered within a few minutes of release. Our electronic mailing list provides quick and timely access to the agricultural and economic information estimates.

Information in this article was sourced from the NASS website, [www.nass.usda.gov](http://www.nass.usda.gov).

Please send questions to Randy Welk, Idaho State Statistician at [randy.welk@usda.gov](mailto:randy.welk@usda.gov). ■



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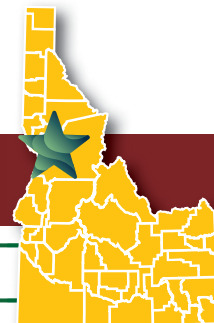
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SENATOR  
**Carl Crabtree**

GRANGEVILLE, ID • DISTRICT 7



**Tell us a little bit about your hometown, where you grew up and where you live now?** I grew up in Kooskia, Idaho and now ranch in Grangeville. My mother was a schoolteacher and dad was a cowboy. Mom was looking for a cowboy and she met dad down in California. I am the oldest of three boys. Right out of college I worked for the University of Idaho as an extension agent in Idaho county for 10 years along with ranching. I bought cattle in college so that's always been part of me.

**Who had the greatest influence on you during your childhood?** I would say my mother. She was a hard-working woman who expected the same from us. No excuses, results only and she pushed me to be my best. I like to tell the story of how back in the early years of the Idaho Cattle Association they had the Cattlemen (men) and CowBelles (women). The two groups would meet together for a period of time and then the ladies were excused to the kitchen. At one particular meeting my mother had had enough of this, and she stayed in the Cattlemen meeting. She knew she had a right to be there and she wasn't leaving. It really helped me to see women as equals and that they can hold any leadership role a man can. My mother was an outstanding woman and could have been a CEO of a company.

**Education?** I attended Clearwater Valley High School (home of the Rams!) and then went to the University of Idaho where I got a degree in Plant Science and Chemistry.

**Tell us about your family; spouse, kids, grandkids? What do they all do?** I have three children, two daughters and a son. My son lives in Seattle and works for a consulting company. I have one daughter in Spokane who works as a district manager for a chemical company and another daughter who is a researcher for the University of Idaho in Moscow. I have one grandson as well.

**What do you do in your free time and other things you do in your community?** It has to be fun or I don't do it! I like to be on my horse riding through the cattle.

**If you could be or do anything else – what would it be?** It really doesn't matter what I'm doing as long as I am



doing something interesting. Everything is interesting to me. Life is really what you make of it. I like to do lots of different things and always want to be learning.

**Why did you decide to run for office?** Honestly, I ran out of excuses not to. I wanted to be in public service. I had some experience with politics through the Idaho Cattle Association (ICA) and I like people and I thought I could do the job. I originally thought it was a three-month gig; boy was I wrong! It's a year-round commitment, but one I really enjoy. I really like the customer service component and like being able to help my constituents. I have been in office for five years now and am in my 3rd term. I want to help while I can.

**Tell us about the committees you have served on and your path to leadership?** I was told by a former senator, "Do not get on the Finance or Education Committees," and lo and behold, I sit on both of those committees along with Transportation. I am vice chair of the Finance committee. I like Finance because honestly, if you want to understand government, follow the money. I also really enjoy the Education committee because I owe everything I have to education; I want to make an impact there.

**What challenges do you think the state faces in 2021 and beyond?** Transportation. North Idaho, for example



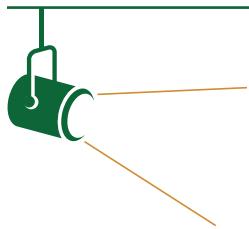
– everything we produce in North Idaho rolls out of there and drives our economy. We need to be able to get our products out via water, rail and road. I like to say, “I don’t want to do it if it’s easy,” so I enjoy working through some of these challenges our state faces.

**What do you love most about Idaho?** I love the geographic diversity of our land. I am an outdoor guy. I love being able to be in the forest and then the desert and everything in between. I love spending time on my ranch.

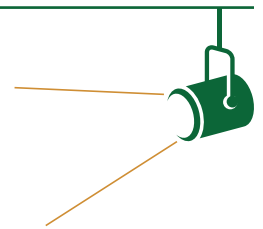
**What are you most passionate about and/or hope to accomplish during your time in the legislature?** We really must move the meter in education and we must do it via early childhood education. That needs to change significantly. I think we need to give parents better resources to help them prepare their children for school because kids just aren’t prepared. Family dynamics have changed and some families must have



two working parents to make ends meet, so we really need to give them support. Educators are professionals and we need to support them so they can support our Idaho families. ■



## EXECUTIVE BOARD SPOTLIGHT



### Jamie Kress

*PRESIDENT, IDAHO GRAIN PRODUCERS ASSOCIATION*

**Tell us a little bit about your hometown, where you grew up and where you live now?** I was born and raised in Aberdeen, ID. It is a small farming community in Southeastern Idaho with about 2,000 people. Aberdeen was a great place to grow up. But like most kids, I was excited to graduate and pursue new adventures. Shortly before moving to college I remember thinking to myself, “life won’t get any smaller than Aberdeen, ID”. Well, I was wrong. For the last 18 years I’ve happily lived on our farm south of Rockland, ID. We’re about 12 miles from Rockland (pop. 300) and 30 miles from a store with milk.

**Tell us about your operation.** Our farm is comprised primarily of winter wheat with a variety of rotational crops that include safflower, mustard, dry peas, and canola. We are located in the Rockland Valley – our farm ground sits in southern Power County and northern Oneida County. We farm at 5,000-6,200 ft elevation in a dryland, high desert environment. Our relatively low annual precipitation requires us to have fallow rotations. We’ve transitioned into no-till over the last seven years and have found it to be very beneficial in many ways. It’s also pretty nice to not spend the summer rod-weeding fallow!



**Who had the greatest influence on you during your childhood?** As it relates to my life and success today, my Dad probably had the greatest influence. We operated two Les Schwab Tire stores in our local agricultural communities. As a teenager I had the unique opportunity to work alongside my parents in both the office and shop. This was where I discovered my love for business, developed strong work ethic, and learned to find pride in a job well done. My Dad took

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every opportunity to teach – from inventory to finance to customer service to personnel, he never hesitated to share insight. He also showed me that there were no limitations to what I could do – being a girl wasn’t an excuse to keep my nails clean.

**Was there a teacher or educator during your early years that had an impact on your life?** Mr. Wilson taught Speech and English at Aberdeen High School. He provided challenging classes that prepared students for college. He graded fairly, but provided personalized feedback and corrections on his students’ work. Even an “A or B+” paper would be returned with red ink all over. It took some adjusting at that young age to receive such straightforward feedback – however, I grew to appreciate it and look forward to the learning and challenge he provided.

**What did you want to be when you grew up and is that what you currently do for work?** I’ve always loved business and clearly my growing up in a family business fostered that. It was in high school that I took

my first accounting class and found my passion. I knew my place in the business world involved data, numbers, and analysis. Following high school I attended LDS Business College where I studied business management and accounting.

Today, in addition to being Cory’s on farm sidekick – moving equipment, picking up parts and supplies in town, or running up to the field with diesel or supplies – I am responsible for all the administrative and accounting work for our farm.

**Tell us about your family; spouse, kids? What do they all do?** Cory (Cordell) and I will celebrate our 20th wedding anniversary this June. I’m not sure where the time has gone, but it’s been a great adventure! Together we run our farm and raise our two kids, Tyson (16) and Hailey (13). Both kids go to school in Rockland. Tyson loves baseball, likes basketball and is turning into a pretty good equipment operator. He’s also our farm’s “Grain Cart Guy.” Hailey loves dance and likes volleyball, basketball, and track. Around the farm, she is learning the ropes of office work and moving





equipment. Both kids participate on a competitive Pocatello mountain bike team.

**How did you meet your spouse?**

**Where did you go on your first date?**

During the summer of 2000 I planned to stay in Salt Lake City where I was attending college. My parents needed my help back home at our tire stores so I (somewhat begrudgingly) packed up and returned home in June. It turned out to be a good thing – that summer Cory and I met while boating with mutual friends on the American Falls Reservoir. At the time he was an engineering student at University of Idaho.

Our first official date was to Lava Hot Springs with a couple of his UI friends. It wasn't long before we each needed to return to our respective schools to finish our degrees. A few plane tickets, several holiday trips back home, lots of emails, and thousands of minutes on a Costco prepaid phone card kept us close.

**What do you do in your free time and other things you do in your community?**

Our life right now revolves around our family and our farm. We spend our time supporting the kid's teams and activities, helping to keep our small community thriving, and serving in the agricultural industry. The four of us also share a mountain bike addiction. We ride whenever possible – from Bellingham, WA to Sedona, AZ. We love the road trips, improving our biking skills, chasing adrenaline, and soaking in nature!

**What one word would you use to describe yourself?**

Grateful.

**If you could be or do anything else – what would it be?**

I'd be a hippy with Cory after the kids head to college. We'd live out of our adventure van for weeks at a time exploring new country around the West, hiking to mountain lakes, and riding our bikes.

**If Hollywood made a movie about your life, who would play you and why?**

I had to ask the family how to



answer this question. We couldn't determine an actress, but concluded that the movie would tell the story of a superhuman wife and mom.

**Thing you love most about farming?** I have two favorites-

The second thing I love about farming is that it's my husband's passion and I get to share it with him. I'm fortunate to be able to contribute in a meaningful way to our operation, support Cory in his efforts, and work alongside him on a common goal.

The first thing I love is the opportunity to live and work in a beautiful rural setting. I often forget that 360-degree views, daily mountain sunrises and sunsets, and living in absolute quiet are not normal.

The second thing I love about farming is that it's my husband's passion and I get to share it with him. I'm fortunate to be able to contribute in a meaningful way to our operation, support Cory in his efforts, and work alongside him on a common goal.

**Why did you decide to serve on IGPA? How has the experience been? What has been your favorite part?**

I decided to serve on the Executive Board as a result

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of the encouragement (maybe even the very strong request) from IGPA’s District 5 board members. Having never really considered the opportunity for myself, when the invitation came I worried that I wouldn’t live up to expectations and contribute like so many of the people who’ve gone through IGPA’s chairs. Looking back, I’m glad that I accepted the nomination to serve.

Without a doubt, my favorite part of serving in IGPA is the people! The relationships and interactions with farmers, board members, and staff from Idaho and around the country have been so enriching.

**What national boards do you sit on?** Ty Iverson and I represent Idaho on the National Association of Wheat Growers Board of Directors. Additionally, I chair the NAWG Domestic Trade & Policy Committee and serve on their Budget Committee.

**Biggest goals during your time on the e-board? Things you’d like to accomplish.** My biggest goals include:

Continuing to build the culture of IGPA - we’re a strong grassroots organization that is welcoming to Idaho’s farm families. It is also important to me that

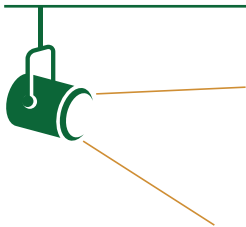
our Executive and Full Boards are professional, that we leverage talents and knowledge, and that everyone always feels respected with the open sharing of ideas and opinions.

Strengthening membership - Strength in both in the number of IGPA members as well as individual member’s leadership and advocacy skills.

Seeing that growers’ needs are well represented well in Boise and Washington DC.

**How are decisions made? How do you interact with the staff? What is that process like?** Our decisions in IGPA are made as a team. Staff and Board Members (Executive Board and/or Full Board) discuss the issues at hand. As Board Members, we bring the farmer perspective; staff brings political knowledge.

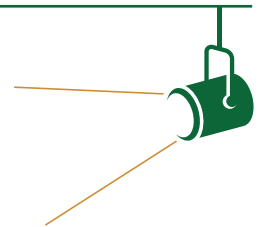
There is typically a lot of discussion and some debate before decisions are made. Our entire board brings a wealth of knowledge and experience - we value this in setting direction and making decisions. In the end, our board(s) function like all good boards do - a consensus is reached and regardless of where we stand individually, the group unites and supports the decision. ■



## EXECUTIVE BOARD SPOTLIGHT

### Lucas Spratling

VICE PRESIDENT, IDAHO GRAIN PRODUCERS ASSOCIATION



**Tell us about your hometown, where you grew up, and where you live now.** I grew up in Declo, Idaho, and my wife Laurie and I now farm in Raft River with my family.

**Tell us about your operation?** My great-grandpa started the family operation down in Salt Lake, where they grew sugar beets, wheat, and alfalfa. When my dad was 14, they bought the dry farm in Idaho and grew wheat in Raft River. Dad purchased the irrigated portion of the farm in 1986, and we started doing wheat, barley, and alfalfa. We rent out to sugar beet farmers for rotation. We sit at an elevation of 4500 ft and average 12 inches of rain per year, however, only about four inches this year!





**Who had the greatest influence on you during your childhood?** I would probably say, my parents and grandparents. They taught me the value of hard work and dedication to family.

**Happy memory from your childhood?** I was always outside with my family and riding dirt bikes. It's a passion of ours.

**Tell us about your education.** I attended Declo High School, then went to Idaho State University in Pocatello. I eventually finished my degree at Boise State University, where I graduated with a degree in business leadership management.

**Was there a teacher or educator during your early years that had an impact on your life?** I had two teachers in high school, my English and science teachers, who always pushed me and encouraged me. They made me think outside the box.

**What did you want to be when you grew up, and is that what you currently do for work?** I guess I always wanted to farm and never really considered anything else. I thought about trying electrical engineering for a minute, but I didn't like it and decided to study business and continue farming. I never took any time off from farming, even in college, so I guess I knew I would always do that.

**Tell us about your family.** My wife Laurie is a high school English teacher at Raft River High School, and we have a son, Orlin, who will be two in August. He is a busy little boy and keeps us on our toes!

**How did you meet your spouse? Where did you go on your first date?** Laurie and I started dating in high school. Our first date was probably at a restaurant in Albion where she was working as a waitress. I would drive up to Albion, wait for her to get off work, and then we would have dinner together.

**What do you do in your free time and other things you do in your community?** I like to ride dirt bikes and spend time outdoors with my family exploring southern Idaho. We just recently bought a camper so that will be our next adventure. Within my community, I serve as a fire commissioner, a member of the local flood board, and my wife Laurie and I are volunteer wildland firefighters.

**What one word would you use to describe yourself?** Just one word is hard, but I would say I am always trying to find something to do, whether on the farm or whatever. I don't like sitting idle.



**If you could have dinner with one famous person, living or not, who would it be and why?** Tom Hanks. I think it would be a delightful, insightful dinner. Lots of laughing, I'm sure, and I would probably come away as a different person.

**If you could be or do anything else – what would it be?** Nope. I wouldn't change anything.

**If Hollywood made a movie about your life, who would play you and why?** Dang, that's a hard one. Maybe Adam Scott? He kind of looks like me, I guess.

**What do you love most about farming?** It's all on you every day. If you mess up, you have to deal with the consequences yourself. And just being outdoors, in the field, and out with nature is pretty rewarding. Growing crops and being on the land is a great feeling.

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**Why did you decide to serve on IGPA?** I got involved in IGPA because a neighbor called and asked if I would sit in on a meeting for him. That was almost seven years ago. I enjoyed everyone at the meeting. They were helpful, welcoming, and enthusiastic, so I was motivated to invest more time with IGPA. I had been a member for a while before I was appointed to the executive board. I took Terry Kulik's spot on the board in 2016.

**How has the experience been?** Being on the executive board has been a great experience. I like having the opportunity to work with people from around the state who are motivated, ambitious, and willing to work through problems to find solutions. We have a great staff who all work hard to ensure that Idaho farmers are more successful.

**What has been your favorite part?** My favorite part is when we get things done. I enjoy knowing that IGPA makes a difference in the day-to-day lives of farmers in Idaho.

**What national boards are you involved in?** I have attended many NBGA and NAWG meetings over the years, which have been great experiences. It's enjoyable to learn about the industry at the national level and what those other groups are doing to help farmers.

**How do you interact with the staff? What is that process like?** Through a group text that is quite often hilarious! In all seriousness, we have multiple levels of communication where everyone collaborates and gives their opinions. We work together to hash out problems until we can reach a solution that works best for the Idaho farmer. Teamwork and listening to each other are essential. The board works closely with staff members. We depend on their knowledge, experience, and daily observations of state and national politics. We rely on Stacey and Wyatt a lot, especially during the session.

**Biggest goals during your time on the e-board?** I think I just really want to continue to advocate for farmers' issues. I want to efficiently identify problems that could affect farmers in Idaho and help resolve those issues. ■

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# SALMON & STEELHEAD

## IN IDAHO

CONTINUED... Second part of this series continued from Idaho Grain Spring 2021.

### WHAT WE KNOW ABOUT THE STATE'S MOST POPULAR FISH & THEIR POPULATIONS


Over the past 50-plus years, fishery scientists and policy makers have discussed several factors affecting salmon and steelhead populations in the Columbia Basin and around the northwest. The most important of those factors have been dubbed the **4 H's**— **hydropower, hatcheries, harvest** and **habitat**. In addition to the 4H's, populations in recent years have been greatly influenced by two other factors – **ocean conditions** and **predation**.

#### HARVEST

If we didn't have salmon and steelhead hatcheries in Idaho, we would have no salmon and steelhead fisheries.


**ABOUT 85% OF IDAHO STEELHEAD HABITAT IS RESERVED FOR WILD STEELHEAD AND IS CLOSED TO FISHING.**

COMMERCIAL HARVEST IN 1911



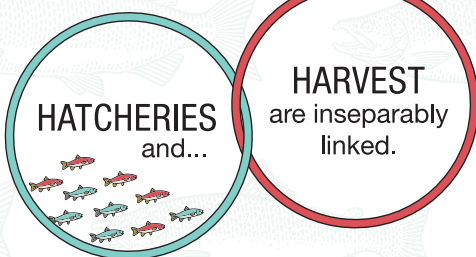
**49.5 MILLION POUNDS LANDED**

IN MID-1990s **LESS THAN 1 MILLION POUNDS**



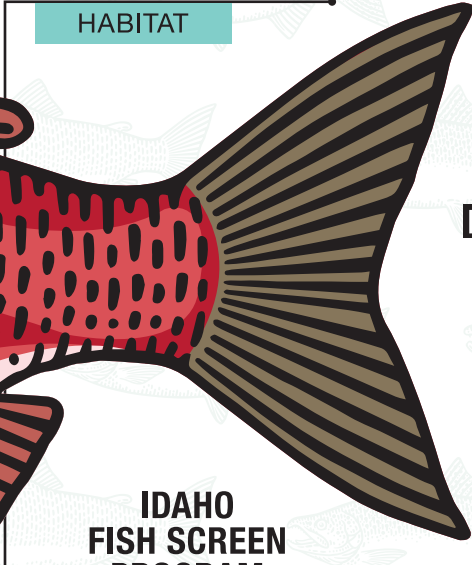
RECREATIONAL HARVEST OF WILD STEELHEAD PHASED OUT IN THE LATE 1970'S, AND HARVEST AFTER 1980 IS COMPRISED ENTIRELY OF HATCHERY FISH.

DURING THE 2000S, IDAHO HARVESTED 50,000+ HATCHERY STEELHEAD PER YEAR. RECENTLY DUE TO POOR FISH RETURNS LESS THAN 10,000 STEELHEAD HAVE BEEN HARVESTED.




**HATCHERIES and... HARVEST** are inseparably linked.

#### HABITAT



Idaho is part of a large-scale habitat effort designed to improve freshwater spawning and rearing conditions so the habitat can send more smolts to the ocean.



**BETTER REARING HABITAT =**

INCREASED CAPACITY OF SPAWNERS TO PRODUCE MORE SMOLTS

600 SPAWNING STEELHEAD CURRENTLY PRODUCE EXISTING HABITAT **15,000 SMOLTS**

AFTER COMPLETED HABITAT PROJECTS 600 SPAWNING STEELHEAD WILL PRODUCE **2x MORE SMOLTS**

**IDAHO FISH SCREEN PROGRAM** has worked with landowners to install and maintain over 270 screens to keep juvenile salmon and steelhead out of irrigation ditches. They cover 2,500 water rights over 4 million acres of land.

## OCEAN CONDITIONS

Recent years have underscored the influence the ocean can have on Idaho salmon and steelhead.

### PACIFIC DECADAL OSCILLATION

# PDO

is roughly a



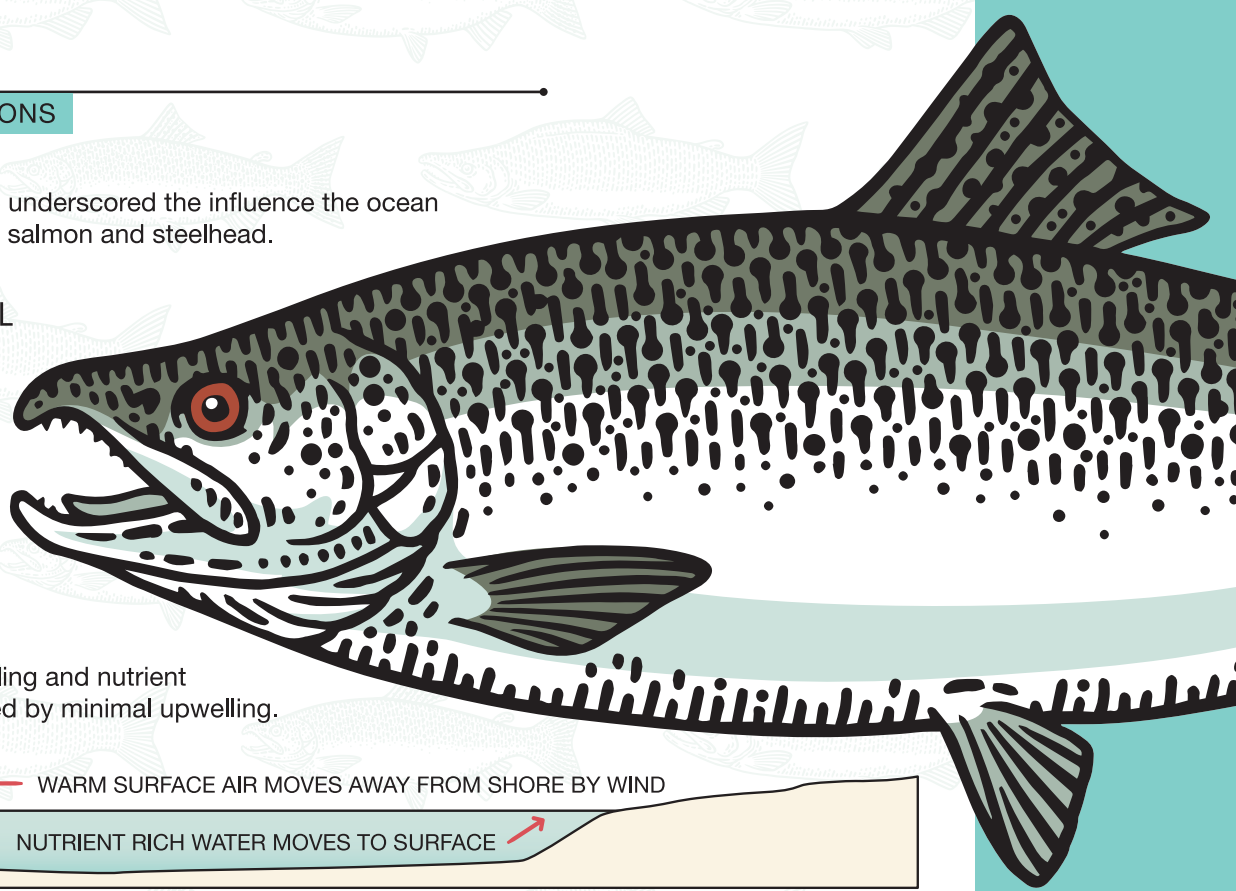
of the good upwelling and nutrient production followed by minimal upwelling.

← WARM SURFACE AIR MOVES AWAY FROM SHORE BY WIND

UPWELLING:

NUTRIENT RICH WATER MOVES TO SURFACE →

One thing is certain—periods of colder temperatures and good upwelling correspond to more abundant chinook populations, and warmer ocean temperatures caused by currents from the south correspond to low populations.



## PREDATION

JUVENILE SALMON AND STEELHEAD FACE A MYRIAD OF PREDATORS ON THEIR TRIP TO THE OCEAN.



### JUVENILE PREDATORS

1. BIRDS 2. FISH

### ADULT PREDATION

1. PINNIPEDS



PREDATION ON ADULT SALMON AND STEELHEAD IS PRIMARILY SEA LIONS.

Considering that every salmon has to enter a very small ladder entrance, it's easy for sea lions to catch and eat their fill below the dam, but they have consumed as many as 10,000 fish in the spring – mostly Chinook. Importantly, those estimates only include consumption in the area immediately below the dam.

THE POPULATION OF SEA LIONS ON THE WEST COAST OF NORTH AMERICA IS NOW ESTIMATED AT ABOUT 300,000.

Governor Brad Little convened a diverse group of Idaho stakeholders, including the Idaho Grain Producers Association, to develop policy recommendations on salmon and steelhead management and recovery. The group worked for over a year and a half to develop consensus-based policy recommendations which were submitted to the Governor in December 2020 and can be found at [species.idaho.gov/governors-salmon-workgroup](https://species.idaho.gov/governors-salmon-workgroup)





# Non-Tariff Barriers: Real world impacts on wheat

BY DALTON HENRY, U.S. WHEAT ASSOCIATES

For those that work in or follow trade policy, getting used to swimming in a sea of acronyms has long been part of the job. But with specific trade barriers proliferating – especially in the areas of plant and human health, even wheat farmers are facing questions and/or hearing concerns about barriers such as SPS, NTBs or MRLs. Whether a person knows the acronyms or not, the increasing use of trade barriers can have an impact on their bottom line. But with cooperative work across the U.S. government and wheat industry, we can both limit the scope and manage the impact of trade barriers.

## So, what are they...?

An NTB is a non-tariff barrier to trade. They encompass a large set of more specific barriers, such as non-science based sanitary and phytosanitary (plant, human and animal health) – that’s the SPS – rules and measures such as requirement for import permits, country of origin labeling, and pre-shipment inspections.

## What do they look like in the real world?

As a widely grown, staple human food, imported wheat often receives additional scrutiny from NTBs. At times countries may enforce tight rules to protect domestic growers. Some markets may also seek to protect growers of other staples like rice, or even corn, by placing additional scrutiny on wheat imported for feed.

Examples of recent NTB challenges to wheat include:

- Weed seed restrictions, such as jointed goatgrass seeds in Chile, which for a time required mills to burn mill screenings rather than processing them for feed. Or, despite ample evidence the weed can’t reproduce in the local climate, Vietnam’s zero tolerance policy on Canadian thistle seeds. As a result, U.S. exporters have had to run additional cleaning to service one of the fastest growing Asian Pacific markets.
- The detection of restricted plant pests such as bunts or smuts. All shipments to China from the U.S. must be tested for TCK (dwarf bunt) and be under a pre-established threshold. The European Union (EU) continues to test all U.S. cargoes for Karnal Bunt using a complex and time-consuming spore wash method.
- The presence of crop protection product residues is an NTB that is growing quickly. Residues are governed by individual countries using Maximum

Residue Levels (MRLs) and many are based on trade-facilitating sound science. But more and more countries are setting MRLs so low that any detection results in violations. This past year we saw the EU and Thailand set effective zero limits for the stored grain insecticide chlorpyrifos methyl and place restrictions on other chemicals.

## What can be done?

While it may seem there is little an individual producer can do about these issues, we can work together to ensure wheat exports are unimpeded. The first is to insist on the use of sound science both in the U.S. and abroad. The U.S. and EU are models for other countries when they set their own regulations – but in different ways. The U.S. follows a risk-based approach. Evaluating the actual risks posed to the environment or humans from either a plant pest or pesticide. The EU follows a hazard-based approach and regulates threats based solely on whether they can be hazards, regardless of their residue level or actual risk posed. To put this in other terms, the EU would look at a risky activity such as driving a car and ban it outright due to the potential for deadly car accidents, rather than considering the actual risk to the population, and setting rules to mitigate those risks, such as speed limits, lane dividers, and seatbelts. The U.S. must take a strong position in international organizations like the United Nations Food and Agriculture Organization (UN-FAO) and Codex Alimentarius Commission (Codex) to support the use of science in regulatory matters.

We can also insist that our producer organizations, including groups like U.S. Wheat Associates (USW), make reducing these barriers a part of their everyday missions. USW has committed three staff members to work on trade policy and SPS barriers, plus has a working group that regularly reviews changes proposed by importers, and advocates aggressively to oppose or mitigate trade restrictions.

A final, key part of avoiding such barriers, falls to individual producers. To encourage them to use the latest crop production technologies judiciously – following label directions, heeding chemical company advice on product selection, and doing their part to keep weeds – many of which may be common in the U.S. – from ending up in large quantities in wheat shipments, keeping them out of regulators’ ire.





## Solutions

When the industry works together solutions can be found and markets opened. Sometimes solutions are quick, such as Chile's mid-2020 acceptance of hammer milling goatgrass seeds rather than burning. Other times it takes years of concerted work, as in the case of TCK and China. The agreement that opened all U.S. ports to serve China and established a spore limit for TCK was decades in the making and required due diligence on the part of PNW growers using TCK-controlling fungicides

and responsible handling by exporters. But that work eventually led to 2020 being a break-out year for soft white wheat exports to China with record sales of more than one million tons.

With more focus and cooperative work, the U.S. wheat industry can make solutions to non-tariff trade barriers like these more common and facilitate wheat movement from our farms to mills and wheat customers around the globe. ■

## Moon Serves 10 Years as Commissioner

The Idaho Wheat Commission and Idaho wheat industry thank Ned Moon, Heyburn, for his commitment, contributions, and decade of service as District 3 Commissioner. Ned was first appointed to the Idaho Wheat Commission by Governor C.L. "Butch" Otter in 2011 and was reappointed to another term five years later in 2016. Ned's maximum term of service representing Southern Idaho wheat growers will be met on June 30.

Ned Moon is a second-generation wheat farmer from Heyburn, a small town nestled along the Snake River between Burley and Rupert in the Mini-Cassia area. Ned has been the marketing manager for Jentzsch-Kearl Farms – a partnership that produces wheat, hay, potatoes, sugar beets, and seed beans – since 2002. After graduating from Brigham Young University, Ned joined the U.S. Air Force and flew jets for more than 12 years. After leaving the military, Ned ran his own business and was operations manager for a chemical production company before joining Jentzsch-Kearl Farms.

"Ned has always brought a wealth of knowledge and diverse experience to the commission, lending a very practical voice to the conversation," said Executive

Director Casey Chumrau. "His thoughtful approach to decision-making has served Idaho growers well throughout his tenure. Ned has loyally represented his fellow farmers across the state, nation, and the around the world."

During his ten years on the Wheat Commission, Ned served as chairman twice. He traveled extensively in Asia, South America, and Central America meeting with buyers of Idaho wheat in global markets and touring mills and end-use facilities promoting Idaho wheat. Ned and his wife, Mary, have three grown children. Ned will enjoy chasing grandchildren and pursuing his hobbies of woodworking, golf, and other outdoor sports. ■



IWC Commissioner Ned Moon, left, and Eduardo Bustamante in 2017 when Chilean millers visited Idaho.

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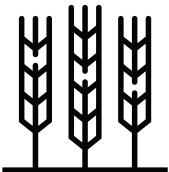
TRAINS

145 miles



TRUCKS

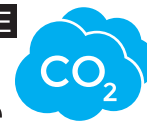
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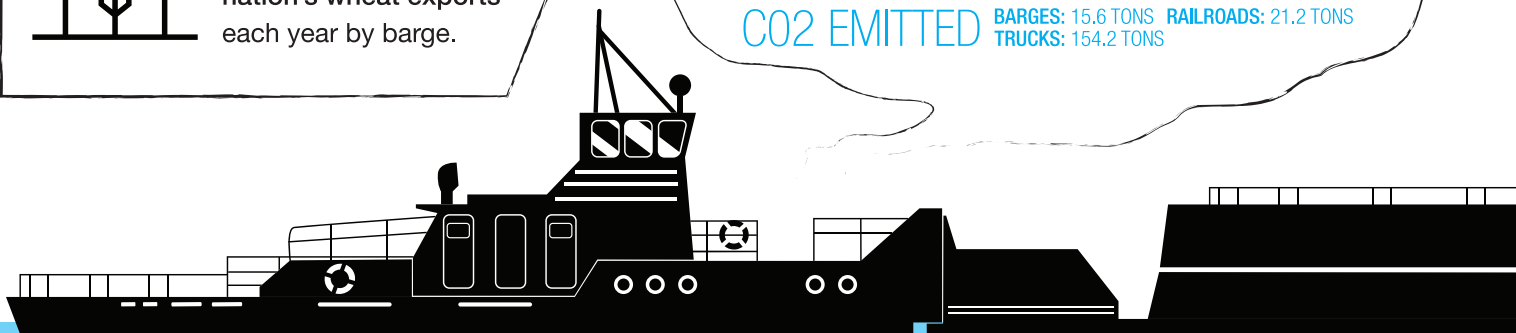


THAN TRUCKS

per ton-mile of cargo moved

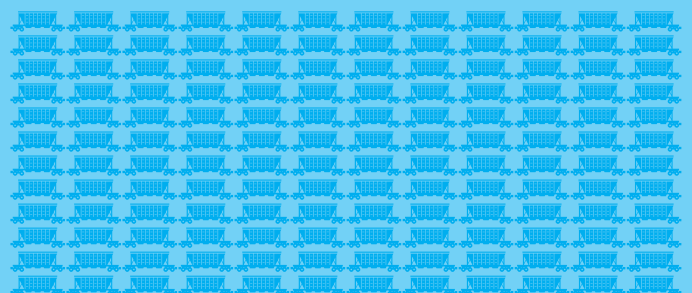
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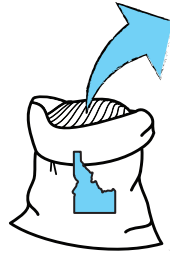


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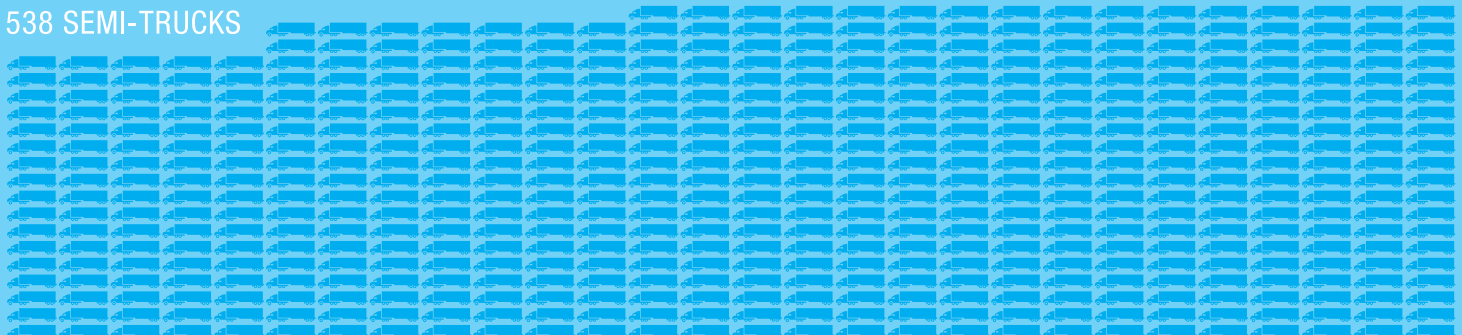
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## Dr. Cathy M. Wilson, Director of Research and Collaboration, Retires

After a decade as the Director of Research Collaboration at the Idaho Wheat Commission, Dr. Cathy Cryder-Wilson will be retiring from her post this summer. Cathy was born and raised in the Magic Valley before going on to earn degrees in biology and botany from Boise State University and plant pathology from the University of Idaho, where she managed the Seed Pathology Lab. She participated in an interdisciplinary pilot program at New Mexico State University and earned a doctorate degree in plant molecular genetics. Cathy is an adjunct faculty member of the University of Idaho Department of Plant Science in the College of Agriculture and Life Sciences.

Before joining the staff at the Wheat Commission, Cathy’s work as world-wide tomato processing project leader for Asgrow Seed Company resulted in hybrid varieties resistant to multiple diseases and possessing high yield and processing qualities the processing industry wanted. Cathy has been a member of, and exchanged expertise with, numerous professional organizations dedicated to the advancement of plant breeding, genetics, and plant pathology.

In her role as Director of Research Collaboration, Cathy has overseen research projects including varietal development, pest control, and quality improvement in wheat, and helped create collaborative research efforts between private and public entities. She also provides support to the commissioners as they review research proposals and determine to which research projects grower dollars will be directed. With her focus always directed toward the future, Cathy has helped facilitate advancements in wheat breeding and variety development for Idaho’s wheat growers.

Cathy reflected on her time with Idaho Wheat and gave some insights into what her future looks like.

### **Is there anything you’ve really loved doing/facilitating/being part of while you’ve been in this position?**

Creating collaborative environments. Getting people together to talk through something who otherwise would never be in the same room. It gets me when an “ah-ha” moment of sudden realization, inspiration, insight, recognition, or comprehension flashes across the face of someone who suddenly sees the thing from a totally



different perspective and knows it’s a breakthrough. Creative synergy happens when the whole is greater than the parts. It is rare.

Our world is so complex and moving so fast one person can’t know or do everything, real collaboration is the future of solutions.

### **Is there anything you want to leave to growers?**

Research and discovery proceed solutions by 10-20 years. Discovery of the foundational knowledge and tools necessary to build solutions is the domain of basic research. If growers want solutions to intractable problems, they will have to invest not only dollars but also leadership in discovery and technology with an eye toward how it might lead to a solution. Research is serial failure until that one little thing falls into place, then all the failures make sense, and there is a breakthrough.



"Cathy came to the Idaho Wheat Commission (IWC) from a position as plant breeder from a private company. She brought a highly technical background to the IWC. She has kept current on the many new plant breeding innovations that have occurred. Very quickly, she provided leadership and support to wheat sciences that is not typical for commodity commissions. Her technical scientific background will be missed, not only by the Wheat Commission, but by scientists that work on Commission research programs."

— **"Potlatch Joe" Anderson, former Idaho Wheat Commission Chair**

"Cathy developed an efficiency and streamlining of the Research Review process that has been of great benefit to IWC commissioners. She was able to condense the process for the commissioners and present a high percentage of proposals that the Commission and the industry would see value in."

— **"Genesee Joe" Anderson, current Idaho Wheat Commission Chair**

### What was the biggest lesson or most rewarding part of being the Director of Research and Collaboration?

Too many lessons learned, I'll stick to the rewards. As a life-long learner, it was a privilege to learn a field crop, many different production systems, and a commodity supply chain. I got a crash course in wheat agronomy from Brad Brown, then extension cereals specialist at the Parma R&E Center and in wheat supply chain from Jim Rooney, still a go to guy when I need to understand something. Gentlemen, thank you for taking time to teach me what I didn't know.

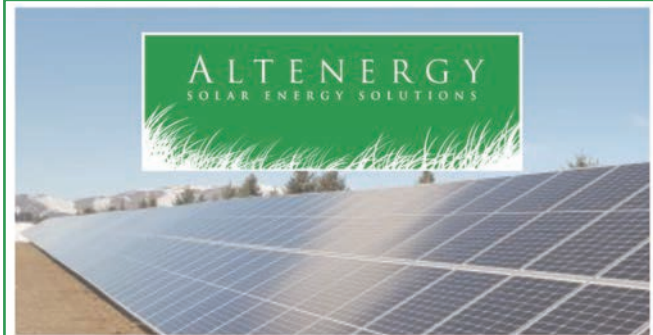
I really enjoyed spending time with producers on their farms, listening to them talk about their passion for what they do. Researchers introduced me to new fields of science and welcomed my input as a member

of the research team. I was able to give back to my alma mater and Idaho agricultural through service to the community.

Most rewarding, though, was translating biotechnology and science into grower speak. As a field breeder I was introduced to the emerging field of molecular genetics at a conference. I was hooked on the potential it held. I realized someone would need to bridge the gap between field and laboratory in the future. I left my breeding program to study plant molecular genetics in a self-directed program. The field was so new, degree programs were non-existent. As Research Director I was able to be that bridge.

### What are your big plans for retirement?

After a year living in COVID-landia without a house-keeper, I'll start in the kitchen. Actually, my husband and I revived the "Sunday drive" to get out of the house and remembered how much we liked road trips. We plan to visit state and national parks and hike some trails. I have a horse to ride, mountains to ski, and a 2-year-old grandson to play with. There is still a lot of intellectual energy left to deal with too, so we will see where that leads. ■



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# Not always a weed? Annual 'Italian' Ryegrass

BY CATHY M. WILSON, PHD, IDAHO WHEAT COMMISSION

Wheat producers have legitimate concerns about ryegrass, a notoriously invasive weed in cereal crop rotations. It seems crazy to wheat growers for anyone to plant Italian ryegrass anywhere for any reason. It is a matter of perspective, however, whether Italian ryegrass is a weed or an excellent forage crop with benefits to soil health. While some in Idaho are using it, experts caution that it requires meticulous management and is never recommended as part of a cereal rotation.

Dr. Albert Adjesiwor, weed management specialist at the University of Idaho (UI) Research and Extension Center in Kimberly, agrees with them, "Personally, I don't think it's ever a good idea to plant Italian ryegrass in cropping systems containing cereals." This article will explore why ryegrass is planted in Idaho, the risk Italian ryegrass poses to cereal crops, and best management practices when ryegrass is planted in your region.

The ryegrass species, *Lolium*, has many sub-species that vary widely in characteristics and hybridize within the genus, resulting in many intermediate forms. Ryegrass species are usually diploids (containing two sets of chromosomes) but easily form tetraploids (containing four sets of chromosomes). This genetic plasticity has allowed some ryegrass species to quickly develop herbicide resistance across most known herbicide sites of action.

However, besides an invasive weed, ryegrass is a high-quality forage for cattle, dairy cows, and sheep. Together, cattle and dairy operations accounted for 4.5 billion of the 8.5 billion farm cash receipts in Idaho. Planting ryegrass for use in forage and grazing operations is an established practice in Idaho.

**Perennial ryegrass (*Lolium perenne L.*)** flowers and sets seed in the second year after vernalization i.e.

"Personally, I don't think it's ever a good idea to plant Italian ryegrass in cropping systems containing cereals."

**Dr. Albert Adjesiwor**

## MANAGING ANNUAL 'ITALIAN' RYEGRASS

- ✓ Choose another option for a cool-season annual grass
- ✓ Confirm Italian ryegrass is not already resistant to any herbicide.
- ✓ Do not use in cereal cropping system
- ✓ In mixes use lower seeding rates to reduce competition with other species
- ✓ Spray, mow or graze to prevent seed set
- ✓ Use integrated weed management
- ✓ As cover crop plant before a broadleaf cash crop - sugar beets or beans-allowing use of different herbicides
- ✓ Use residual and postemergence herbicide programs
- ✓ Use multiple herbicide modes of action
- ✓ Don't rely only on glyphosate
- ✓ Monitor for plants escaping control and volunteers.

experiencing temperatures of 45 degrees or lower for 8 weeks. It is one of the highest quality forage grasses for pasturing cattle and sheep. Not surprisingly, it is grown on 250,000 acres in the northeast United States and in the states of Washington and Oregon. Perennial ryegrass can be found throughout Idaho in golf courses, shady lawns, pastures, and forage crops.

**Annual ryegrass (*Lolium multiflorum Lam.*)** commonly called "Italian" ryegrass, is grown on 1.2 million acres mostly in the southeast United States. It has little cold tolerance and behaves like an annual crop in the Midwest. Annual Italian ryegrass is a high-quality annual grazing grass for dairy cattle. Its high yields and ability to maintain productivity through the midsummer slump make it useful in pasture rehabilitation and revitalization of 5th-year alfalfa fields.



“Occasionally, in pasture or forage applications and cover crops being grazed NRCS recommends incorporating Italian ryegrass. But NRCS has issued strong warnings about using Italian ryegrass in wheat or cereal rotations.”

**Derek Tilly**

Annual Italian ryegrass is a frequent cool-season grass component of cover crop mixes. Multi-species mixes are used to create diversity in the crop and do so by having at least one representative from these crop classes: cool-season grass, cool-season broadleaf, legumes, warm-season broadleaf, and warm-season grass. Annual Italian Ryegrass establishes quickly, developing an extensive fine root system and lots of biomass. Its exceptional grazing qualities make it a desirable component of cover crops intended for grazing. The massive fine root system improves soil structure and supports soil health.

Annual Italian ryegrass is not dependent on cold temperatures for flowering. It will **prolifically set seed the first season**. The crop is killed by frost, but it leaves behind a plentiful bank of seeds in the soil and that is what concerns Dr. Adjesiwor, “Wheat producers use burn-down herbicide applications before planting wheat in the spring or fall to control weeds and disease harbored in the ‘green-bridge’ between crops,” he explained. “Glyphosate is the most commonly used herbicide, and is very effective on annual Italian ryegrass, but overuse in northern Idaho has encouraged the development of herbicide-resistant populations. We want to avoid a similar situation in this region.”

In southwestern and southcentral Idaho, many broadleaf crops are grown in the rotation including glyphosate-resistant sugar beets and alfalfa. Glyphosate-resistant crops make it easy to spray out annual Italian ryegrass before it goes to seed, thus preventing seeds from being added to the soil seed bank. In this rotation, cereals are often out of the field for 5 years. Multiple broadleaf crops allow more options for using herbicide chemistries with different modes of action. In these cropping systems, the soil health benefits outweigh the risk of establishing an herbicide-resistant population of annual ryegrass.

Crop rotations in southeastern Idaho are more limited, being centered on potato, sugar beet, and cereals. “In



Albert Adjesiwor spraying wheat plots as part of his research on managing weeds, like ryegrass, in cereal crop rotations, March 2021. Photo courtesy of Dr. Albert Adjesiwor, University of Idaho.

these cropping systems, wheat is more frequent in the rotation. Thus, the repetitive use of glyphosate in glyphosate-resistant sugar beets and chemical fallow, places a huge selection pressure for selecting Italian ryegrass with resistance to glyphosate,” explains Dr. Adjesiwor.

Cover crops have been promoted by the NRCS for improving soil health, reducing soil erosion, and improving infiltration of water to reduce nitrate and phosphorus runoff while protecting water resources. Derek Tilly, manager of the NRCS Aberdeen Plant Materials Center in Aberdeen, weighed in on Italian ryegrass, saying, “Occasionally, in pasture or forage applications and cover crops being grazed NRCS recommends incorporating Italian ryegrass. But NRCS has issued strong warnings about using Italian ryegrass in wheat or cereal rotations.” Tilly referenced a section

Continued on next page



Continued from previous page

of the *Plant Materials Technical Note No. 67, Cover Crops for the Intermountain West, January 2017*, page 7, quoted below.

*“It [annual ryegrass] usually winterkills, but if it overwinters, it will grow quickly and produce seed in late spring. It can be a serious problem in oat and wheat crops if allowed to set seed and has been shown to develop herbicide resistance.”*

AgriTerra, located in Rupert, is one of the largest sellers of mixed-species cover crops in southern Idaho, and markets some specific-use cover crop mixes containing ryegrass. Luke Adams, AgriTerra representative, said this, “We use Tetilia Italian Ryegrass in mixes for forage and cover crops because it doesn’t go to seed in the first year. Mixes are planted late August following small grain, or flown in over standing corn silage, to get fast growth for late grazing in October. The mixes are followed in the spring with a broadleaf crop, often sugar beet or potato. I don’t ever recommend using a grass species to a customer doing a small grain to small grain crop rotation.” Adams explained cover crops are intended to break the crop cycle to manage disease, pests, and weeds. Cover crop mixes for use in small grain to small grain rotations would likely have brassica and other species not grown on the farm in the cash crop rotation.

Dr. Adjesiwor warns, “Weeds (or crops) like Italian ryegrass can easily get out of hand no matter how well they are managed because of two main reasons: 1) they easily develop resistance to herbicides, and 2) the seeds can remain dormant in the soil, leading to infestations for multiple years after just one seeding. If annual Italian ryegrass is the only feasible choice, it must be ensured that it never goes to seed (zero tolerance for escapes), but Italian ryegrass should be avoided if at all possible. **Avoid**

**planting small grains for at least two years after planting annual Italian ryegrass** to ensure that any volunteer annual ryegrass is identified and controlled.”

Dr. Jared Spackman, Barley Agronomist, at UI Aberdeen Research and Extension Center, added his perspective to risks associated with planting annual Italian ryegrass. “Because annual (Italian) ryegrass is a quick-growing and an aggressively competitive bunch grass, it is recommended that you only utilize it in



Annual Italian ryegrass in field of wheat. Photo courtesy of Dr. Caio Brunharo, Oregon State University.

your cropping system if you plan to closely manage it through mowing or grazing to prevent it from going to seed. While it generally winterkills, some years

it may overwinter, growing quickly in the spring and setting seed. Because annual Italian ryegrass is so aggressive, it will outperform other small grains, especially under irrigation, and other species when used in a cover crop mix. It should not be planted before wheat or other small grain rotations.”

The consensus about annual Italian ryegrass is clear: don't plant it.

Ryegrass plays many roles in cropping systems, including herbicide-resistant weed, annual grassy species for crop rotation, a cool-season grass component in cover-crop mixes, nutritious high fiber





biomass for forage mixes, or a perennial turfgrass. Perennial ryegrass is not cause for concern, but **the consensus about annual Italian ryegrass is clear: don't plant it.** However, if you must, follow common-sense practices to reduce the risk of establishing herbicide-resistant populations of annual Italian ryegrass (see side bar).

Understanding the uses and characteristics of ryegrass species will help farming, cattle, and dairy operators make decisions that can prevent annual ryegrass from becoming a serious weed problem in southeastern Idaho's cereal crop rotations. ■

## Idaho Wheat Commission Licenses UI Cookie

For the first time, the Idaho Wheat Commission (IWC) has licensed a wheat variety in an effort to increase the return on investment of wheat grower dollars. UI Cookie, a soft white spring wheat with excellent yield, superior end-use quality, and easy threshing ability, was developed at the University of Idaho (UI) Research and Extension wheat breeding center in Aberdeen by Dr. Jianli Chen. The development of UI Cookie was funded through research dollars allocated by the Idaho Wheat Commission.

Approximately 30% of the IWC research budget is directed to breeding programs for variety development. IWC commissioners recognize that grower dollars have allowed wheat breeders to craft wheat varieties that are ideal for Idaho's high desert growing environment and are eager to share UI Cookie with Idaho wheat producers. It is along that vein that IWC commissioners have extended a bridge between the investment of grower checkoff dollars and the return of putting that investment to practical use through the licensure of UI Cookie.

"Every year a huge portion of Idaho wheat tax dollars goes to support breeding programs. UI Cookie was developed using these tax dollars," explains IWC commissioner Cory Kress, Rockland. "IWC took advantage of a unique circumstance to obtain the rights for UI Cookie and release it as a public release for farmers across the state without royalties or plant back restrictions."

UI Cookie has boasted exceptional yields in trial, comparable to yields of UI Stone, and has topped the yields of cereal grains in Idaho for the past two years. In addition to high yields, UI Cookie has improved stripe rust resistance and good Fusarium head blight tolerance. UI Cookie stands out with exceptional end-use quality particularly, as the name suggests, in cookies.

While IWC is not in the business of seed production, as part of the mission of the Commission, our interest



Growers were invited to participate in UI Cookie trials and seed has been planted throughout the state.

lies in getting UI Cookie into the hands of Idaho wheat growers who can benefit from its quality genetics. IWC has negotiated an exclusive license with UI to commercialize UI Cookie, released by the UI wheat breeding program at Aberdeen in April 2020. IWC is managing the first seed expansion from foundation to registered seed through provisions in a sublicense with the seed producer and is working with several reliable partners with many years of experience throughout the state, taking foundation seed to registered seed. Idaho growers were invited to participate in a strip trial with UI Cookie and seeds were distributed through a material transfer agreement. UI Cookie is licensed under the Preferred Variety Protection Act (PVPA), but title V was not invoked, which allows growers to save enough seed back after harvest to plant on their own farm, and does not have an attached royalty.

"UI Cookie is a [soft white spring wheat] variety developed from grower funds and is being given back to the growers unrestricted," said Kress.

Ask your area seed dealers for availability next year. ■



Sugar beet wireworm, pictured, is one of the most predominant and damaging species in PNW small grains.

## To Till or Not to Till?

BY ARASH RASHED, ROHOLAH SADEGHI AND ATOOSA NIKOUKAR

Wireworms are the larvae, or immature stage, of click beetles, which can damage a wide variety of crops. The adult beetles start to emerge from their overwintering refuges between April and June, depending on species and location, to mate and lay their eggs. Once the eggs hatch, the larvae can stay in the soil for several years, causing damage to all crops in rotation. Wireworms are also considered one of the most concerning pests of small grains in the Pacific Northwest and Intermountain West regions of the United States. An objective measure of yield loss to wireworms in wheat and barley has yet to be developed and current management practices to reduce wireworm damage have yielded limited and/or inconsistent success.

There are many species of wireworms that live in cultivated and non-cultivated lands. For decades, researchers had been primarily focused on identifying a generic approach to control all pest species of wireworms. Wireworm species differ in the way that they respond to their environment. For example, some species may be active throughout a growing season, whereas others may only appear and cause damage during a certain time of the year or growth cycle. Therefore, management practices may not be equally effective against all wireworm species. The knowledge of individual species and the way they interact with their environment will help to develop and apply the most efficient integrated pest management practice against the target species.

Funded by Idaho small grain producers, and in collaboration with the Idaho Wheat and Barley Commissions, researchers at the University of Idaho's Integrated Pest Management Laboratory initiated a multi-year study to determine predominant pest species of wireworms in Idaho production systems and to identify environmental factors, including agricultural practices, that may explain their presence and prevalence.

To date, more than 220 fields have been monitored across the state. The sugar beet wireworm, scientifically known as *Limonius californicus*, was the most commonly found pest species of wireworms in the state. The western field wireworm *L. infuscatus* (northern and southeastern Idaho), the flat wireworm *Aeolus mellillus* (statewide), *Hypnoidus bicolor* (southeastern Idaho) and several other species were also found to be present in wheat and barley fields. As we continue our Idaho survey, we routinely explore our data to see if there are any patterns that are starting to emerge which could help to address some of the existing questions regarding species-specific wireworm ecology and damage. One of those frequently asked questions by producers is whether tillage can help with reducing wireworm pressure and damage in fields.

In fact, tillage is considered a practice expected to negatively affect wireworms. Tillage exposes eggs and the vulnerable, freshly emerged wireworms, to air



resulting in quick desiccation and, subsequently, elimination of the pest. This also means the timing of tillage makes a difference. Tillage should be a continuing practice to eventually result in a reduction in wireworm numbers by persistently removing freshly laid eggs; most wireworm species live for multiple years and it is only the eggs and freshly emerged individuals that would rapidly desiccate.

“As no-till has gained popularity in my area, wireworm numbers have increased as well. While I can’t say it is 100% related, it seems to reason to me that a no-till soil provides a more hospitable environment for click beetle egg-laying and survivability than does conventional tillage fields” noted Cory Kress, a wheat producer in Power County and Idaho Wheat Commissioner.

There are, however, instances that suggest no-till might have been associated with reduced wireworm damage: “Since I have focused my efforts on rebuilding soil organic matter and the overall health of my soil through no-till, cover crops, and crop diversity, I have not experienced any noticeable wireworm damage,” reported Pat Purdy, a barley producer in Blaine County, and Idaho Barley Commissioner. Here, however, in addition to no-till practice, efforts have been made to also incorporate cover crops and crop diversity into the cropping system. Diversified cropping systems – for example, proper rotation, especially those including alfalfa – are known to be at relatively lower risk of experiencing significant wireworm pressure. We have also demonstrated reduced wireworm damage in soils with high organic content. But, what about the no-tillage practice, per se?

Circling back to our discussion on among-species variations in response to environmental factors, we all recognize the complexity involved with the answer to this question. To decouple the impact of all combinations of all factors that may impact individual wireworm species, there is a need for a substantial data set, a goal that we are currently working toward achieving. We have recently assembled a dataset summarizing five years of state-wide wireworm monitoring to compare the impact of tillage and no-till practices on wireworms, excluding all other recorded variables. Until now, overall, no distinct difference in wireworm numbers have been observed between till and no-till or minimum-till farms. However, with the knowledge of species diversity we were able to dig further into our data. It was only when we excluded the fields infested with most damaging and common sugar beet and western field wireworms (both from the genus *Limonius*) from our data that wireworm presence appeared relatively higher in the fields that applied tillage. These non-*Limonius* species, however, are not common and are less likely to result in significant losses in the PNW small grains.

We also observed that the wireworm presence in relation to tillage did not follow the same trend in irrigated and non-irrigated fields. In non-irrigated fields, the presence of the most damaging *Limonius* species was lower in the fields that applied tillage, whereas in irrigated fields, we have yet to find a significant effect of tillage on wireworm presence (additional data is needed). **Sugar beet wireworm and western field wireworm are the two most predominant and damaging species in the PNW small grains**, and based on our surveys up until now, we can conclude that at least in dryland/rainfed systems tillage is expected to negatively affect their presence.

Our monitoring program is ongoing and as we continue to survey additional fields we expect to increase our ability to detect the impact of various agricultural practices, including tillage, on wireworms. ■

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1,000 Springs Mill BARLEYmax™ Flakes.

# 1,000 Springs Mill of Buhl is Bringing New Food Barley Products to Consumers

BY LAURA WILDER, IDAHO BARLEY COMMISSION

With a strong focus on organic and regenerative agriculture, 1,000 Springs Mill of Buhl is bringing new food barley products to the market, in addition to their line of other organic and non-GMO products that includes several bean varieties, popping corn and hard red spring wheat berries. The company’s barley products currently include organic purple barley, bulk black barley, and BARLEYmax™ barley flakes, with barley flour soon to follow.



The 2017 start-up company is a locally owned, third generation organic and non-GMO organization producing products to benefit their local community, with the

goal of being in every specialty food store in the U.S. and beyond, according to owner Tim Cornie. Company owners Cornie and Kurt Mason have over 40 years of farming experience. Their passion is Healthy People, Healthy Future™, and being local farmers, it isn’t what they do, it’s who they are. The company is focused on their vision to be a part of the community as it evolves over time, giving people the opportunity to live a healthy lifestyle.





Tim Cornie, Amber Snow and Paige Yore of 1,000 Springs Mill show off some of the company's products

While the Mason and Cornie families have been farming in Idaho's Magic Valley for three generations, they have been pioneers in the local organic farming movement, focusing on healthy soil, thus healthy people, bringing forth a healthy future.

In 2014 Cornie went on an extended vacation throughout Europe. As he traveled, he was amazed by the local cuisine—everything was local and fresh. Processed foods were nowhere to be found. The food was healthy, vibrant, and delicious. On Cornie's journey home he began wondering why the American food offerings were so vastly different from European cuisine. He thought about our industrial food system and how he could bring more nutrient dense foods to his family and community. "The U.S. is 20 years behind Europe in regenerative farming practices," said Cornie. "The U.S. mentality of cheap, bulk food has not been serving people well when it comes to health. People here are now more interested in conscious farming practices and healthier food."

Through collaboration with Mason, 1,000 Springs Mill was formed. Mason, who grew up on a farm in the

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Amber Snow, who works in HR for 1,000 Springs Mill, recently entered the Idaho Barley Commission's "Bring on the Barley" Recipe Challenge in partnership with the American Heart Association and was a category winner with the recipe which is now being featured on their new BARLEYmax™ barley flakes packaging. Give her delicious, healthy recipe a try. If you can't find, BARLEYmax™ flakes in your local retail store or Costco yet, you can order the product direct from 1,000 Springs Mill at: <https://1000springsmill.com/shop/>. The purple barley can also be ordered here.



Laura Wilder, IBC (left), and Amber Snow

## Turkey Max Meatloaf in Muffin Pan

### Ingredients:

- |  |                               |
|--|-------------------------------|
| 1 lb ground turkey                         | 1/4 cup diced red bell pepper |
| 1 large egg                                | 1 finely chopped garlic clove |
| 1/2 cup 1000 Springs Mill Barleymax flakes | 1/2 teaspoon of salt          |
| 2 tablespoons pesto                        | 1/4 teaspoon of pepper        |

### Instructions:

1. In a large bowl, combine all ingredients and mix well.
2. Grease a muffin pan (see note<sup>1</sup>)
3. Use a large ice cream scoop to fill the greased muffin tin equally
4. Bake at 350 degrees (f) for 18-20 minutes.
5. Serve and enjoy!



### Note:

<sup>1</sup>This recipe makes 6 large sized meatloaf balls, or 12 mini-meatloaf balls. May top with favorite meatloaf sauce.





## What is BARLEYmax™?

BARLEYmax™ is a patent-protected complete whole grain that has a ton of nutritional benefits! This barley grain variety has a significantly superior nutritional profile compared to many other commercially available grains.

Australian-based The Healthy Grain (THG) partnered with U.S.-based Scoular to bring BARLEYmax™ into the U.S. for production and distribution in North America. Scoular is the exclusive seed dealer in North America and licenses food companies for wholesale or retail distribution of BARLEYmax™. For more information about BARLEYmax™, contact Brett Wilken at Scoular at 208-749-8881 or [bwilken@scoular.com](mailto:bwilken@scoular.com).

A single serving of BARLEYmax™ contains 2x the fiber and 4x the resistant starch of most other commercial grains.

BARLEYmax™ has a ton of other nutritional benefits!

- Resistant starch: this prebiotic fiber helps fuel good gut bacteria
- Soluble fiber: this fiber slows down carbohydrate digestion
- B-glucan: this soluble fiber reduces cholesterol absorption
- Insoluble fiber: helps improve overall bowel function

This versatile superfood can be used in any meal to:

- Replace your everyday grains such as oatmeal, rice, or cereal
- Boost fiber levels in smoothies, dips, and soups
- Replace granola in energy bars, parfaits, and other snacks
- Help bind together meatballs and burgers, OR to replace meat
- Add flavor and texture to homemade bread, cookies, and other baked goods

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Magic Valley brings a modern edge to the company through his knowledge and experience in business. Mason continues to instill the values of a farmer to his family, “My vision is to ensure that my little girls know how important a healthy lifestyle is and how it can benefit their future,” said Mason.

For a new start-up company, the COVID Pandemic has been a challenge, but through diversification, the company has fared well and is poised to grow, especially with barley products and the addition of a new flour mill. The company is currently looking for more organic barley growers. If you are currently transitioning to organic growing, or interested in doing so, please contact Tim Cornie at 208-543-2111 or [tim@1000springmill.com](mailto:tim@1000springmill.com). ■



1,000 Springs Mill owners Tim Cornie and Kurt Mason

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Wireworm - High pressure	++++	+++	+
Wireworm - Moderate pressure	++++	++++	++
Cutworm	++++	++++	-
Armyworm	++++	++++	-
Aphid	+++	-	+++
Hessian fly	++	-	++
Grasshoppers	++	-	++



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