VHEAT LIFE The official publication of the Washington Association of Wheat Growers JUNE | 2019 **TAKING AIM AT WEEDS WITH PRECISION TARGETING ALSO IN THIS ISSUE:** Getting to know Rep. Kim Schrier WSU's Land Legacy program **Fighting Fusarium crown rot** The real meaning of 'horsepower' Address Service Requested 109 East First Avenue, Ritzville, WA 99169 Washington Association of Wheat Growers

WHEAT LIFE

Volume 62 • Number 06 www.wheatlife.org

The official publication of



WASHINGTON ASSOCIATION OF WHEAT GROWERS

109 East First Avenue Ritzville, WA 99169-2394 (509) 659-0610 • (877) 740-2666

WAWG MEMBERSHIP

(509) 659-0610 • (877) 740-2666 \$125 per year

EDITOR

Trista Crossley • editor@wawg.org (435) 260-8888

AD SALES MANAGER

Kevin Gaffney • KevinGaffney@mac.com (509) 235-2715

GRAPHIC DESIGN

Devin Taylor • Trista Crossley

AD BILLING

Michelle Hennings • michelle@wawg.org (509) 659-0610 • (877) 740-2666

CIRCULATION

Address changes, extra copies, subscriptions Chauna Carlson • chauna@wawg.org (509) 659-0610 • (877) 740-2666 Subscriptions are \$50 per year

WAWG EXECUTIVE DIRECTOR

Michelle Hennings

WAWG EXECUTIVE COMMITTEE

PRESIDENT
Jeffrey Shawver • Connell

VICE PRESIDENT Ryan Poe • Hartline

SECRETARY/TREASURER Howard McDonald • Coulee City

PRESIDENT EMERITUS Marci Green • Fairfield

APPOINTED MEMBERS Andy Juris • Bickleton Ben Adams • Coulee City Anthony Smith • Richland

Wheat Life (ISSN 0043-4701) is published by the Washington Association of Wheat Growers (WAWG): 109 E. First Avenue • Ritzville, WA 99169-2394

Eleven issues per year with a combined August/ September issue. Standard (A) postage paid at Ritzville, Wash., and additional entry offices.

Contents of this publication may not be reprinted without permission.

Advertising in Wheat Life does not indicate endorsement of an organization, product or political candidate by WAWG.

President's Perspective



Working together for our industry

By Jeffrey Shawver

In small farming operations like mine, finding time to get everything done is a challenge. There's only so many hours in the day, and I can only work one field at a time. I see a similar dynamic at play when I look outside my farm. If I have a problem that needs to be solved legislatively, I can get in touch with my local representative or senator. I might even speak to my federal representative. However, my sphere of influence is small, and I probably have a field

that needs attention more than I need to be making phone calls. For farming help, I have family members that step in to lend a hand, especially when I'm traveling. For the rest of it, I can call the Washington Association of Wheat Growers (WAWG). My single voice isn't loud enough to grab the attention needed, but the voice of the entire wheat industry in Eastern Washington is.

At its core, WAWG is a member-driven, nonprofit organization that advocates on the behalf of its members—Washington wheat growers. It is funded primarily through membership dues and the assessment growers pay on each bushel of wheat they sell. In our last board meeting, we went through next year's budget. The biggest expense we have is funding the work our committees do—traveling to Olympia and Washington, D.C.; printing educational materials to hand out to legislators; and promoting our industry at ag shows and farm fairs.

In the last three years as I've gone through the WAWG chairs, I've seen first-hand how WAWG uses this money to make a difference. Eastern Washington is big, geographically, but our political influence is small. We have to be able to reach west-side legislators, both at the state and federal level. To do that, we travel and meet with them. Then we travel some more and hold more meetings. We leave them folders full of facts and policy points. We bring them out to our farms to see what's happening on the ground, and we financially support legislative tours put on by the state's ag industry. We also pay dues to like-minded organizations that are able to extend our sphere of influence, organizations like the National Association of Wheat Growers or the Inland Ports & Navigation Group.

At the national level, implementation of the 2018 Farm Bill is an example of the point I'm trying to make. Agencies at the U.S. Department of Agriculture are slowly working through the changes mandated by the farm bill, but growers need to know now how these changes are going to apply to them. The pressure to get the farm bill implemented as quickly as possible needs to come from Congress. Trade is another example. I know we need fair trade agreements, and so do most of my farming neighbors, but does that representative from an urban district on the East Coast know? The only way to press our concerns is to meet with these people and tell them why we need the USMCA ratified now, or why we need a trade agreement with Japan.

I'm proud to be a farmer, and I'm proud to belong to an organization that does so much good work for myself and other wheat growers.

This month heralds the start of field days and variety testing tours. A huge amount of work goes into these events, all to help inform growers of the latest research and varieties that are coming down the pike. You can visit wawg.org or smallgrains.wsu.edu to find a list of events near you. I hope your summer is off to a good start. \blacksquare

Cover photo: Wheat in spring near Pomeroy, Wash. Photo by Resa Cox. All photos are Shutterstock images or taken by *Wheat Life* staff unless otherwise noted.

Inside This Issue

WAWG President's Perspective 4 **Membership Form** 6 **WAWG at Work** 16 **Policy Matters** 22 **Washington Wheat Foundation** On the Hill **24** Q&A with Rep. Kim Schrier Target acquired 28 Technology promises weed precision **Educational outreach 30** Lincoln County students participate in ag day **Profiles 32 NRCS** agronomist Tracy Hanger 35 WGC Chairman's Column 36 LEAVE Land Legacy **WGC Review** Special Section 38 LORENZ BOHRNSEN Leaving a land legacy through WSU program FARM Gifted to WSU in 1990 **Fusarium crown rot** 42 WASHINGTON STATE Disease is prevalent, persistent, pernicious UNIVERSITY 44 Wheat Watch legacyofland.wsu.edu **Hoof power** 46 Old-time plowing in Davenport 48 On Lease **50** The Bottom Line **52** Quoteworthy **54 Your Wheat Life 56 Happenings**

58

Contributors

Jeffrey Shawver, president, Washington Association of Wheat Growers Gary Bailey, chairman, Washington Grain Commission

Advertiser Index

Scott A. Yates, communications director, Washington Grain Commission

Kevin Gaffney, ad sales manager, Wheat Life Diana Carlen, WAWG lobbyist

Timothy Paulitz, research plant pathologist, USDA-ARS Kimberly Garland-Campbell, research geneticist, USDA-ARS T. Randall Fortenbery, Ph.D., Thomas B. Mick Endowed Chair in Grain **Economics, Washington State University**

Todd King, CPA, Leffel Otis and Warwick, P.S.

WAWG MEMBERSHIP FORM

Please check level of membership ☐ Student \$75 ☐ Family \$200 (up to 2 members) ☐ Grower \$125 ☐ Partnership \$500 (up to 5 partners) ☐ Landlord \$125 ☐ Convention \$600 ☐ Industry Associate \$150 ☐ Lifetime \$2,500 Name Farm or Business Address City State Phone Fax **Fmail** County Affiliation (if none, write state) Circle all that apply: Producer Landlord Individual Industry Rep. Business Owner Student Other Return this form with your check to:

Thank you to our current members

We fight every day to ensure that life on the family farm continues to prosper and grow. WE NEED YOUR SUPPORT.

If you are not a member, please consider joining today.

LEVELS OF MEMBERSHIP						
	Greensheet Newsletter	<i>Wheat Life</i> Magazine	National Wheat Grower Newsletter	Annual Harvest Prints	WAWG Convention Free Registration	One Vote per Member
Producer/Landowners (Voting Membership)						
Grower or Landlord \$125	X	X	X			X
Family \$200 (2 family members)	X	X	X			X
Partnership \$500 (1-5 family members)	X	X	X	X		X
Convention \$600 (2 individuals)	X	X	X		X	X
Lifetime \$2,500 (1 individual)	X	X	X	X		X
Non-Voting Membership						
Student \$75	X	X	X			
Industry Associate \$150	X	X	X			

WAWG's current top priorities are:

✓ Preserving the Snake River dams.

WAWG • 109 East First Ave. • Ritzville, WA 99169.

Or call 877-740-2666 and use your credit card to enroll by phone.

- ✓ Maintaining a safe and sound transportation system that includes rail, river and roads.
- ✓ Establishing favorable trade agreements.
- ✓ Fighting mandatory carbon emission regulations that would raise prices on fuel and fertilizer.
- ✓ Advocating for guick implementation of the 2018 Farm Bill.

If these issues are important to your operation, become a member today and help us educate our legislators and advocate for agriculture. We are making sure the wheat industry's voice is heard.

More member benefits:

- Greensheet ALERTS
 WAWG updates
- Voice to WAWG through opinion surveys
- National Wheat Grower updates
- State and national legislative updates



509-659-0610 • 877-740-2666 • 509-659-4302 (fax) www.wawg.org





Protected with Diacon®-D IGR

Unprotected wheat after 150 days of insect infestation*

Keep Wheat and Barley Neat with Diacon®-D IGR

Is there anyone out there who still isn't clear about what insects do to your grains? From causing discount penalties to rendering grains altogether inedible, infestations make a verifiable economic impact. Diacon®-D IGR is a ready-to-use solution for protecting wheat, barley and other grains in a variety of storage sites. This dry formulation is an insect growth regulator that stops larval development that is ideal for water challenged situations.

Make sure your grains stay clean with Diacon*-D IGR. Call 800.248.7763 or visit BugFreeGrains.com to learn more.





YOUR GRAIN.

WAWG at WORK

ADVOCATING FOR THE WHEAT FARMERS OF EASTERN WASHINGTON

Budgets, trade, agency updates take up May board meeting

For most farmers, the return of warmer weather signals the beginning of the growing season. For the Washington Association of Wheat Growers (WAWG), it means it's time to talk financials. WAWG leaders and staff spent part of May's state board meeting reviewing the association's proposed 2019-20 budget in preparation for the next Washington Grain Commission (WGC) meeting where the proposed budget will be presented.

"We want to make sure that we are using growers' assessment dollars wisely and getting the most mileage out of the funds allocated to us by the grain commission," said Michelle Hennings, WAWG's executive director. The majority of the funds coming from the grain commission are used to facilitate the advocacy efforts of WAWG in Olympia and Washington, D.C., which include travel expenses and educational materials for WAWG's state and national legislative committees. The funds also help support the activities of the natural resources, transportation and research committees. The proposed budget is a 2 percent increase over last year. If the grain commission approves WAWG's budget request at their annual meeting,

the board will vote to accept the proposed budget at the next board meeting, scheduled for June 11.

Lacey Miller, one of the 2019 Washington Wheat Ambassadors, attended the board meeting and thanked WAWG leaders for the opportunity to participate in the association's advocacy efforts.

Board members also heard a trade update from WGC Commissioner Mike Miller. He began his presentation by telling the group that free trade is a myth, someone always gets an advantage. A better way to talk about trade, he said, is to promote fair and reciprocal trade agreements. He took a quick look at each of the trade agreements currently being discussed and gave board members a quick summary of their statuses:

• Mexico and Canada. The U.S.-Mexico-Canada
Agreement is in the pre-ratification process. The agreement is basically done and is waiting for Congress to pass it and for the president's signature. The practical deadline for Congress to take up the legislation is by August, thanks to the congressional calendar.



U.S. Department of Agriculture's agencies were well represented at the May board meeting of the Washington Association of Wheat Growers. From left are Roylene Rides at the Door, Natural Resources Conservation Service state conservationist; Chris Mertz, regional director of the National Agricultural Statistics Service; and Ben Thiel, Risk Management Agency regional office director.



2019 Washington Wheat Ambassador Lacey Miller (standing) attended the Washington Association of Wheat Growers' May state board meeting and thanked board members for the opportunity to participate in advocacy efforts.

IT TAKES

ENDURANCE

TO WITHSTAND THE UNEXPECTED

You can't control nature. But you can plant the latest WestBred® Certified Seed varieties, built on years of research and breeding to stand strong against the season's unknowns.





WB1783 · WB4311

TAKE ON THE SEASON AT WestBred.com

WestBred and Design* and WestBred* are registered trademarks of Bayer Group. ©2019 Bayer Group, All Rights Reserved. MWEST-19009_WL_FULLPG_05-082019

WL WAWG AT WORK

- **Japan.** Talks are at the private, prenegotiation stage, but the U.S. negotiating team seems to be optimistic.
- China. As Miller described it, "they've pushed the pause button" on these talks. At one point, it looked like an agreement had been reached, but then China stepped back from the table. In response, the Trump Administration levied another round of tariffs on \$200 billion worth of Chinese imports. Miller said talks are ongoing.

In regards to China, Miller pointed out that in the U.S., 15 percent of the land is arable with only 4 percent of the world's population (just more than 320 million), while China has only 8 percent arable land with 20 percent of the world's population (1.3 billion). The U.S. has 3.2 million

The next Washington Association of Wheat Growers board meeting will be Tuesday, June 11, beginning at 10 a.m. in the Wheat Foundation Building in Ritzville, Wash. Board meetings are open to the public. farmers with an average farm size of 120 acres. China has 270 million farmers with an average farm size of 2 acres.

WAWG Lobbyist Diana Carlen called in with a review of the 2019 State Legislative Session that ended last month. She said there had been lots of bad bills for agriculture this session, but most of them had been defeated. The budget

included \$750,000 for a study to look at the impacts of breaching the four lower Snake River dams. WAWG and much of the state's ag industry is opposed to funding this study. The Soil Health Initiative that WAWG supported was only partially funded, with \$250,000 allocated to Washington State University. See page 16 for more on the 2019 Legislative Session from Carlen.

Three of the U.S. Department of Agriculture's (USDA) state agency leaders also attended the board meeting to give WAWG leaders updates. Roylene Rides at the Door, state conservationist for the National Resources Conservation Service (NRCS), said there is a lot of rule-making going on in her agency, thanks to the 2018 Farm Bill. She hopes to see final rules by October.

A new program in the farm bill gives state NRCS offices the opportunity to identify 10 practices for their state that will qualify for a 90 percent cost share.

Staffing is still an issue for Washington state's NRCS office, with the process to fill a position taking up to a year. The state office has a cap of 149 employees; currently they are down to 120. Rides at the Door said they are trying to shuffle employees around and work with outside contract

help. The state office has a deadline of Aug. 1 to allocate all the state's funds or risk losing that money.

"We have the money, I just don't know if I can get it on the ground with the staff I've got," Rides at the Door said, adding that it's not just NRCS that has been hit with staffing issues. Other USDA agencies are also trying to fill positions.

Ben Thiel, Risk Management Agency (RMA) regional office director, talked about two program changes that might be of interest to wheat farmers. First, cover crops can now be planted during the fallow period of a summer fallow practice and still maintain the summer fallow insurance designation if the cover crop is terminated in accordance with NRCS termination guidelines.

The second change concerns how RMA deals with quality losses, something that WAWG and the National Association of Wheat Growers lobbied hard for in the 2018 Farm Bill. While the agency is still working on it, one option being considered is to treat quality losses similar to a yield exclusion with producers able to exclude certain quality losses from their actual production history. The exclusion would be tied to a notice of loss and would be retroactive. The agency is still working on the details, both internally and with industry stakeholders.

Chris Mertz, regional director of USDA's National Agricultural Statistics Service (NASS), said hiring issues at NASS are similar to the problems at NRCS. The 2019 Census of Ag was recently released, and according to the results, Mertz said Whitman County is still the #1 wheat producing county in the nation. Lincoln County came in at #4. NASS just released the first forecast for winter wheat yields. The projected total for Washington state was down slightly, but planted acreage stayed the same, he said. He encouraged farmers to fill out NASS surveys so they can reach their reporting threshold. Mertz also told growers that NASS employees are happy to attend county meetings to answer questions.

Switching over to state agencies, Phillip Garcia and Scott Steinbacher from the Washington State Department of Agriculture's (WSDA) Grain Inspection Program, talked about the new directive from USDA on falling numbers testing. The new directive makes changes in how grain samples are prepared and how a barometric pressure calculation is applied.

"We will see more consistency across the system," Steinbacher said. The new directive puts guidelines in place to ensure that grain samples are tested by WSDA in a consistent manner across the export chain, something that growers have long complained about.

WAWG leaders reviewed their recent trip to Washington, D.C., with WSDA director, Derek Sandison. Hennings said the trip was very productive and meeting

HORSCH

Farming with passion

New! From North Pine Ag...



COUGAR 250

5-Fold, 2-Rank 50 ft. Drill



- 7.5" Paired Rows
- Disk Leveler
- Cutting Coulters
- Packer Wheels
- Andersen Razor **Openers**
- Precise Seed & Fertilizer **Placement**

Also Introducing the SW12000 Commodity Cart

- 1600 Gallon Capacity 170 bu. Wheat
- Non-Steerable Axle Load-Unload Auger

Double compartment cart can be configured For Liquid Fertilizer & Seed or Dry Fertilizer & Seed

NORTH PINE AG EQUIPMENT, INC.

2007 E. Babb Road Rosalia, Washington 509-994-2133 or cschmidt@att.net

Your Rural Property Specialist



Farmland, timberland, recreational properties, Lake Roosevelt and homes on acreage!

I work all over Eastern Washington... If you want to BUY or SELL, call me!

Contact Greg Schuster, Broker Rural Property Sales Coldwell Banker Tomlinson



realtordad@aol.com

509-993-2545

Insurance for Whatever You Grow

Whether you raise cattle or grow nursery stock, row crops, grain, hay or fruit, COUNTRY Financial® has got you covered. Your local financial representative can help balance your need to protect what you have with your desire to build for the future. We offer great coverage for farm vehicles, too. Grow your own way with COUNTRY Financial.

James Penning LUTCF

Yakima

(800) 741.6135

Paul Koethke LUTCF

Moses Lake (800) 689.9259





AUTO | HOME | LIFE | BUSINESS | RETIREMENT

Policies issued by COUNTRY Mutual Insurance Company®, Bloomington, IL.

1114-511HO



legislators with Sandison gives both organizations credibility and shows how well they work together. The main topics discussed were farm bill implementation, trade and conservation programs.

DC trip nets meeting with House speaker staff, agencies

Washington Association of Wheat Growers (WAWG) participated in a Washington, D.C.-fly-in hosted by the National Association of Wheat Growers (NAWG). During the trip, WAWG leaders met with freshman Democrats, committee members and U.S. Department of Agriculture (USDA) agency staff. They also visited the offices of legislators from South Carolina, Nevada, Virginia, Wisconsin, New York, Maine, Illinois, Minnesota and Arizona.

"Because we had met with Washington state's congressional delegation just two weeks prior to this trip, the national organization put us to work reaching out to other states' congressional legislators," said Michelle Hennings, WAWG's executive director. "Our message to these offices were to educate them on wheat as well as the importance of passing the U.S.-Mexico-Canada Agreement (USMCA); explaining the Japan and China trade agreements and how vital they are to our industry; and farm bill implementation and how important it is to protect the farm bill during the appropriations process."

The group also visited with Farm Service Agency (FSA) Administrator Richard Fordyce in regards to farm bill implementation. According to Fordyce, FSA's first priority is the



Washington Association of Wheat Growers leaders (from left) President Jeffrey Shawver, Past President Marci Green, Past President Ben Adams and Executive Director Michelle Hennings spent a week in Washington, D.C., last month talking to legislators about trade and farm bill implementation.

Dairy Margin Program, followed by the Agriculture Risk Coverage and Price Loss Coverage programs, which are scheduled to have sign-ups beginning Sept. 1. The group also discussed the lack of staff in county offices.

With help from NAWG, WAWG leaders were able to visit with the trade and ag staff of the Speaker of the House, Nancy Pelosi (D-Calif.). The main topic of discussion was trade agreements, specifically the USMCA. Staff members stressed that they understood the importance of trade to agriculture but said there are still concerns with how the agreement treats pharmaceuticals and labor issues.

"Overall, our meetings were very beneficial, and we thank NAWG for the opportunity to meet with other states to assess their support for the farm bill in light of the appropriations process," said Jeffrey Shawver, WAWG president. "Being part of a national organization like NAWG gives us the opportunity to address issues with one voice and show support for wheat growers across the nation."

FSA announces CRP sign-ups coming

USDA's Farm Service Agency (FSA) will accept applications beginning June 3,



SEEDING & TILLAGE Equipment



1206NT NO-TILL BOX DRILL

- A heavy-duty design allows this drill to combine the productivity of a large drill with the versatility of a compact drill.
- The no-till fluff and plant system creates the perfect combination for accurate seed placement.
- The modular design of the 1206NT allows this drill to have up to three different box options: native grass, fertilizer, or small seeds.
- A 4-speed gearbox is user-friendly and accurately sets planting rates.

NTA-3510 NO-TILL AIR DRILL

- Large capacity, dual-bin carts allow for easy filling and an auger system makes emptying of the cart effortless.
- Coulter-assisted opener system splits no-till seeding into two operations: penetration and seed placement.
- Integral cart-implement linkage offers exceptional maneuverability.
- Uniform seed distribution ensures that the seed gets to the bottom of the trench.





VERTICAL TILLAGE TOOLS



CONVENTIONAL TILLAGE TOOLS



PRECISION APPLICATION TOOLS



5'-10' COMPACT DRILLS



HEAVY-DUTY NO-TILL DRILLS

FULL LINE OF PLANTERS

FINISHING TOOLS

COVER CROP TOOLS

VISIT YOUR LOCAL GREAT PLAINS DEALER OR GET MORE INFORMATION AT: www.GreatPlainsAg.com

FARM & HOME SUPPLY

Pomeroy, WA - 509-843-3395

CENTRAL MACHINERY SALES

Moses Lake, WA - 509-765-1257

MORROW COUNTY GRAIN GROWERS

Lexington, OR - 800-452-7396

WALTER IMPLEMENT, INC.

Odessa, WA - 509-982-2644

FARM EQUIPMENT HEADQUARTERS

Pendleton, OR – 541-276-6222

MORROW COUNTY GRAIN GROWERS

Wasco, OR - 800-824-7185

CENTRAL MACHINERY SALES

Pasco, WA - 509-547-8920

CENTRAL MACHINERY SALES

Sunnyside, WA - 509-837-3833



2019, for certain practices under the continuous Conservation Reserve Program (CRP) sign-up and will offer extensions for expiring CRP contracts. The 2018 Farm Bill reauthorized CRP, one of the country's largest conservation programs.

"USDA offers a variety of conservation programs to farmers and ranchers, and the Conservation Reserve Program is an important tool for private lands management," said FSA Administrator Richard Fordyce. "CRP allows agricultural producers to set aside land to reduce soil erosion, improve water quality, provide habitat for wildlife and boost soil health."

FSA stopped accepting applications last fall for the continuous CRP sign-up when 2014 Farm Bill authority expired. Since passage of the 2018 Farm Bill last December, Fordyce said FSA has carefully analyzed the language and determined that a limited sign-up prioritizing water-quality practices furthers conservation goals and makes sense for producers as FSA works to fully implement the program. Fordyce said FSA plans to open a CRP general sign-up in December 2019 and a CRP Grasslands sign-up later.

A one-year extension will be offered to existing CRP participants who have expiring CRP contracts of 14 years or less. Producers eligible for an extension will receive a letter describing their options. Alternatively, producers with expiring contracts may have the option to enroll in the Transition Incentives Program, which provides two additional annual rental payments on the condition the land is sold or rented to a beginning farmer or rancher or a member of a socially disadvantaged group. See more on TIP on page 48.

Wheat groups applaud CRP announcement

The Washington Association of Wheat Growers joins the National Association of Wheat Growers (NAWG) in applauding FSA's announcement to extend CRP contracts. We commend the agency for recognizing the need to provide producers an option to extend contracts by allowing for one-year extensions to existing CRP participants who have expiring contracts of 14 years or less.

In Washington state, nearly 190,000 acres of CRP is set to expire in 2019. More



SPOKANE FARM FAIR. Kellie Miner (left) of Rockford, Wash., and Stacey Rassmussen of Harrington, Wash., volunteered at the Washington Association of Wheat Growers' booth during the Spokane Farm Fair last month at the Spokane County fairgrounds. Nearly 1,200 area fifth graders learned about different commodities and agriculture at the two-day event.

than 195,000 acres is set to expire in 2020.

"CRP is an important conservation program option for many of our members, and we appreciate that FSA is proactively taking steps to allow for contract extensions. This action is especially important if FSA will not hold a general sign-up before contracts expire this year," stated NAWG President and Lavon, Texas, farmer Ben Scholz in a press release. "We encourage USDA to move quickly to implement the 2018 Farm Bill and to allow enrollment options for producers in all the conservation programs.

"Growers are on their land every day and know more than anyone else what it takes to be a good steward of their land," continued Scholz. "Farm bill conservation programs help farmers ensure that their land will be productive today, tomorrow and for years to come."

Franklin County growers meet

It was a good turnout at the meeting of the Franklin County wheat growers in Connell last month.

Trade and the upcoming county picnic were the main topics of conversation.

Washington Association of Wheat Growers (WAWG) president, Jeffrey Shawver, updated the group on his recent trip to Washington, D.C., where he and other WAWG leaders met with legislators on farm bill implementation, trade agreements and tariffs. Growers also heard a report from Washington Grain Commissioner Mike Miller on how tariffs are affecting the Washington wheat industry. Despite the pain Pacific Northwest wheat growers are feeling, Miller told the group they are in a better position than grow-











WL WAWG AT WORK

ers in the Midwest, thanks to the premium that soft white wheat is able to garner.

County president Leonard Van Buren reminded growers they need to get their Loan Deficiency Payment paperwork filled out and signed before any crop changes hands at the elevator. Growers are encouraged to visit the local Farm Service Agency office if they have any questions.

Finally, plans were set for the county's summer picnic. This year, the picnic will be held on June 20 at the

Kahlotus tennis courts beginning at 6 p.m. Meat will be provided, but attendees need to bring their own drinks and seating. The group is also asking that anybody whose last name begins with A-M bring a side dish. Those with a last name beginning with N-Z are asked to bring a dessert. All Franklin County wheat growers are welcome, as well as businesses that cater to the wheat industry.

After the picnic, the Franklin County wheat growers won't meet again until September. ■

Asotin County awards scholarships to high school seniors

The Asotin County wheat growers have awarded three scholarships this year to local high school seniors who are planning to major in an ag-related field. Anna Aarstad, Carmen Eggleston and Jolee Sanford all received funding from the wheat growers to help them with college expenses.

Anna Aarstad

Aarstad is the daughter of James and Denise Aarstad. After high school, she will be heading to Casper College



in Casper, Wyo., where she will be studying ag business and animal science.

In high school, Aarstad has been involved in softball, volleyball and FFA. She is also a member of Asotin City's junior fire department. She enjoys working with animals, especially judging livestock, an activity she plans to continue at Casper College.

"Judging livestock was something my mom made me do in 4-H. I didn't want to do it, but when I got into high school and learned in class how to do it, it became something interesting and competitive," she said, adding that having to defend her decisions during judging—the reasons portion of the event—has helped her with her public speaking skills.

Aarstad said the scholarship will help take some of the financial burden of college off of her parents.

"The more I can put towards college, it makes me feel better. I don't want it on their (her parents) shoulders for any reason," she said. "I'm so thankful for the scholarship. It means a lot and is greatly appreciated."

Carmen Eggleston

Eggleston is the daughter of Rich and Shannon Eggleston. She is the fifth generation to grow up on

her family's farm where they grow wheat and triticale. She will be attending the University of Idaho where she plans to study biology. While in high school, she's been involved in FFA, specifically parliamentary procedure, track and cross country. When she's not helping out on the family farm, Eggleston enjoys horseback riding and other outdoor



activities. She said she is grateful to the Asotin County wheat growers for offering the scholarship.

"I want to thank them for helping me with the financial aid. Any little thing helps as college is pretty expensive," she said.

Jolee Sanford

Like Aarstad, Sanford will be making her way to Wyoming for college. She'll be attending Laramie County Community College in Cheyenne where she'll

be working towards degrees in ag business and radiology. She is the daughter of Chad and Kerry Sanford, and her family grows oat hay crops on their family farm.

While in high school, Sanford was involved in volleyball and track "with a little rodeo on the side." She was a member of the Advanced

Parliamentary Procedure team at FFA nationals that placed in the top 10 last year. She is also involved in livestock judging and will be pursuing that passion in college. She said she is very thankful to the wheat growers and will put the scholarship to good use.

"I would love to go for a full Ph.D. Literally any little bit of money will help with that," she said. ■

POMEROY GRAIN GROWERS



Central Ferry Terminal

Serving farmers for over 85 years

- → Competitive Seed Sales → Certified Crop Advising
- → Custom Minimum-Till Fertilization
- → Custom Seeding & Spraying → Fertility Services
- → Soil Sampling, Record Keeping & QPS Mapping
- → Grain Sales Truck & Barge Grain Shipping

We offer a complete range of service levels, from Cash & Carry to Specialized Custom Services

Pomeroy Grain Growers, Inc.

Pomeroy Grain Office 509-843-1694 Pomeroy Agronomy 509-843-1394

Farm Commodities-Colfax 800-424-5056

www.pomeroygrain.com



Intrigued by cover cropping, but lack the moisture to pull it off?

CROP ROTATIONS WILL DO THE JOB!

Build your soils for the future...using old science that has worked for centuries

WINTER CANOLA:: NON GMO:: IMI-TOLERANT

- ROUNDUP READY VARIETIES ALSO AVAILABLE

TRITICALE :: PLOW-DOWN MUSTARD

START BULDING YOUR SOIL HEALTH NOW!

Rotations increase yields, break disease cycles & reduce weeds.

SPECTRUM CROP DEVELOPMENT RITZVILLE WA

Curtis 509-659-1757 Todd 509-641-0436



POLICY MATTERS

2019 Legislative Session wraps up with some wins, losses

By Diana Carlen WAWG Lobbyist

The Washington State Legislature adjourned on April 28, the final scheduled day of the 105-day session, after passing a \$52.4 billion, two-year state operating budget. The on-time finish was the first time in a decade that a budget-writing session had concluded within the scheduled timeframe.

The final budget is nearly \$8 billion higher than last biennium, which is a 17.5 percent increase in spending. The budget, passed by Senate and House Democrats, relies on new revenue to fund it. Notably, neither a proposed capital gains nor a carbon tax was included. The final budget relies on the following tax increases:

- Higher taxes on service-sector businesses and large high-tech firms to pay for workforce and higher education;
- A graduated real-estate excise tax (REET) to replace the state's current flat tax of 1.28 percent on all sales. Agriculture and timber lands are exempt from the tax rate increase and will continue to pay the current base rate of 1.28 percent.
- A higher B&O tax on banks;
- A higher hazardous substance tax known as the MTCA tax;
- A tax on institutional investment services;
- A tax on vaping products;
- A change in the nonresident sales tax exemption that is of concern to border communities; and



• A tax on travel agents and tour operators.

Other notable highlights in the budget impacting the agricultural community are:

- Snake River Dam Removal Study: \$750,000 is appropriated to the governor's office to contract with a third party to establish a process for local, state, tribal and federal leaders and stakeholders to address issues associated with the possible breaching or removal of the four lower Snake River dams in order to recover chinook salmon populations. The Washington Association of Wheat Growers (WAWG) had opposed this proviso in the budget as unnecessary and duplicative of the ongoing federal environmental review process.
- Soil Health Initiative: \$250,000 is appropriated to Washington State University for the university's Soil Health Initiative. WAWG supports the Soil Health Initiative.
- **Glyphosate Inventory:** \$10,000 is provided to the Department of Enterprise Services to query and inventory state agency use of glyphosate. A report to the Legislature is due on Dec. 31. 2019.
- Increased Spill for Salmon: \$580,000 is appropriated to the Washington State Department of Ecology for rule-making to change the standards to allow for a higher volume of water to be spilled over Columbia and Snake river dams to increase total dissolved gas for the benefit of salmon.
- Increased Landowner Voluntary Participation: \$1 million is appropriated to the Washington State Conservation Commission and conservation districts to increase landowner participation in voluntary actions that protect habitat and benefit salmon and southern resident orcas.
- Voluntary Stewardship Program: \$8,456,000 from the public works as-





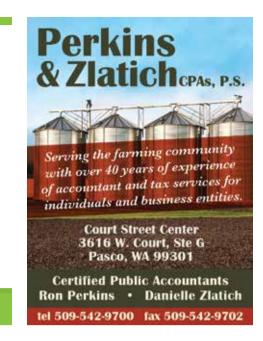


- Self Calibrating 50 Times Per Second
- **Adjusts Spray Timing with Speed**
- One Button Startup
- Blanket or Spot Spray with One System
- Installs on SP's, Pull Type and Wheeled

vantage-pnw.com

Robb Soliday (509) 988-7018

Jason Emerson (509) 681-0466



FOR RENT

WASHINGTON WHEAT FOUNDATION ANNEX

(IN RITZVILLE, WASH.)

Rental Includes:

- Seats 100
- Full-service kitchen
 - Wi-Fi
- Free coffee and tea
- Pullout wall divider
 - 2 large screens
 - Free parking
- 18 x 22 lobby to gather or serve buffet
- Separate board meeting room (seats 12)

\$50 (0-4 HOURS) OR \$100 (4+ HOURS)

Contact Chauna Carlson at the Washington Wheat Foundation rental line

(509) 659-1987



Full Service Driveline Shop

Good Supply of Parts In Stock!



Trucks-Heavy to Light • Ag & Industrial • Automotive • Hotrod • Racing

Call **Darren Sharkey**

Over 32 Years of Experience

- ✔ Driveline Fabrication & Repair
- PTO's & Shields
- **Vibration Analysis & Mitigation**
- ✔ Driveline Balancing
- Parts & Components
- Custom Applications
- Metric or American Standard

We're Here To Solve **Your Problems!**

Emergency: 509-842-0245



509-545-4600



1206 E Lytle Street •

Pasco, WA

www.tankmaxnw.com



sistance account is provided to the state conservation commission for implementation of the Voluntary Stewardship Program.

- Sustainable Farms and Fields Grant Program: \$30,000 is appropriated solely for the state conservation commission and the Washington State Department of Agriculture to develop recommendations for legislation or additional work that may be needed to implement a sustainable farms and fields grant program that prioritizes funding based on net reduction of greenhouse gas emissions on farm, aquatic or ranch lands, including carbon sequestrations.
- Environmental Justice Work Group: Although legislation on this topic died this session (SB 5489), advocates quietly slipped in a \$390,000 proviso into the final operating budget funding a watered-down version of the environmental justice task force (without rulemaking authority). It will meet four times around the state and report back to the Legislature with recommendations for incorporating environmental justice principles into agency actions.

The agenda was dominated by Democrats as this was the first year since 2013 that they enjoyed solid majorities in both the House and Senate. It was an action-packed session, especially on the governor's top legislative priority of climate change that had stalled in previous years.

WAWG weighed in on a number of pieces of harmful legislation to the industry that were ultimately not adopted, including legislation that would have imposed a low carbon fuel standard (HB 1110), cap and trade legislation (SB 5981), minimum crew size requirements (HB 1841) and legislation insinuating that Washington farmers were engaged in slavery and human trafficking (SB 5693).

WAWG actively supported the following pieces of legislation that passed this session:

- Road Weight Limits (SSB 5883): This legislation allows vehicles carrying farm products from the field to exceed road weight limits by up to 5 percent on public roads. It also requires that a farm receive at least one written warning in the calendar year for excess weights before traffic penalties can be imposed.
- Pesticide (SSB 5550): This legislation implements the bipartisan recommendations of the pesticide safety workgroup. The bill establishes the pesticide application safety committee to explore how state agencies collect and track data and consider the feasibility and requirements of developing a shared database, including how the Washington State Department of Health could use existing tools to better display multiagency data regarding pesticides.

Time to step off the dam-breaching cycle

Editor's note: This is an editorial piece from leaders of the Washington Association of Wheat Growers that appeared in newspapers throughout Eastern Washington.

In agriculture, everything is cyclical. The same seems to be true of the lower Snake River dams. Every few years, advocates of breaching the dams start speaking out on why they should be torn down, and the communities and industries that depend on those dams answer back with facts to prove why the region needs them. This time around, however, the stakes have been raised, thanks to breaching advocates tenuously linking the dams to survival of the Southern Resident Killer Whales (orcas) and the \$750,000 Washington Gov. Jay Inslee proposed and the Legislature funded to study the impacts of breaching the dams.

Stakeholders in the Pacific Northwest have already spent millions of dollars on salmon recovery. Chinook populations in the Columbia-Snake River Basin have been increasing since the lows of the 1990s, unlike the declining Puget Sound Chinook salmon stocks, which are the #1 food source of the orcas according to NOAA Fisheries. We are disappointed the state of Washington is planning to spend hundreds of thousands of dollars more on a study that is redundant and pointless. Adding to that, the U.S. Army Corps of Engineers is already undertaking a federally mandated environmental impact study on the lower Snake River dams. Our taxpayer money would be better spent improving our roads and bridges or investing in education and research.

The Columbia-Snake River System is the top wheat export gateway in the U.S., and the third largest grain export gateway in the world. Farmers as far away as the Midwest use the system to access international markets. More than half of the wheat barged on the system passes through at least one of the lower Snake River dams, and it would take at least 137,000 semi-trucks or 23,900 railcars to transport that wheat by rail and road.

Breaching the dams would end barge navigation on the Snake River and force nearly 10 million tons of commercial cargo, valued at \$3 billion, onto our roads and rails, adding wear and tear, not to mention increased levels of air pollution and traffic congestion. For comparison's sake, a typical four-barge tow moves the same amount of cargo as 140 rail cars or 538 trucks.

Beyond moving goods, the lower Snake River dams also provide enough energy to power 1.87 million homes. ▶



521 N. EASTERN • SPOKANE. WA (509) 534-9088 • class8trucks@aol.com



Dusty Walsh of Half Moon Prairie, just a piece south of Deer Park. Grandpa Tom arrived after WWII. Dad Tim is still walking those same steps that Dusty treads now.

Dusty came back from WSU with a masters in **Crop Science and a strong desire to continue** the family farm, adding his high school sweetheart Erin as his lovely bride.

Busy, busy, busy raising hay, grains, canola, sunflowers, cows and kids...#3 is on the way! But never too busy? Erin runs "You Pick Flowers of Half Moon Blooms."

Dusty needed a step-deck for hauling hay and equipment. Shown above "just sitting on the deck for the hay!" Call us for the trailers or trucks. Call Dusty and Erin for beef, hay and for flowers. 509-844-1356

Marc B. Lange (509) 991-9088 Scott Lund (509) 995-5024 Jeff Miller (509) 599-9926 **NOT JUST TRUCKS. TRAILERS TOO!**

www.class8trucksales.com

GROWING GENERATIONS TOGETHER



A Branch of Bank of Eastern Oregon

Colfax Dayton LaCrosse Pasco Pomeroy

beobank.com

Member FDIC



Intrigued by cover cropping, but lack the moisture to pull it off?

CROP ROTATIONS WILL DO THE JOB!

Build your soils for the future...using old science that has worked for centuries

WINTER CANOLA:: NON GMO:: IMI-TOLERANT

TRITICALE :: PLOW-DOWN MUSTARD

START BULDING YOUR SOIL HEALTH NOW!

Rotations increase yields, break disease cycles & reduce weeds.

SPECTRUM CROP DEVELOPMENT RITZVILLE WA

Curtis 509-659-1757 Todd 509-641-0436





SCAFCO Rock Steel Structures, Inc. SEAFCO





Shops • Warehouses • Equipment Storage Steel Buildings . Steel Stud Pole Buildings





Grain Storage For Farms or Warehouses Grain Handling • Grain Bin Accessories



Water Storage Tanks · Aeration Systems Hopper Bottom Bins . Catwalks, Ladders and Towers

Contact Scott Rock scott@rocksteel.com

509-764-9700 Moses Lake, Wash.



Hydropower is one of the lowest-cost, most environmentally friendly, consistent sources of renewable energy available. And unlike solar or wind power, the dams can produce power at night or when the wind isn't blowing. The cost to replace critical winter energy provided by the dams has been estimated at more than \$7 billion.

The dams also provide a source of revenue by allowing cruise ships to dock in Clarkston, Wash., a business that brings more than \$2.1 million to the local economy. And we haven't even touched on the benefits of the dams to the recreation industry.

There are other factors that have a bigger impact on orca health than the Chinook salmon populations in the Columbia-Snake River Basin. Salmon populations in Puget Sound have shown little to no increase since being listed as endangered 20 years ago. In addition, Seattle is one of the fastest growing cities in the nation. That increase brings with it more urban runoff, which leads to more water pollution in Puget Sound and more pressure on area waterways. Other threats to salmon runs include sea lion predation and warming ocean conditions. Perhaps funding would be better spent studying these issues instead.

Washington wheat growers share the same concerns as advocates of dam breaching about stabilizing the orca population, but we don't believe breaching the lower Snake River dams is the solution. Continued investment like Bonneville Power Administration's installation of improved fish ladders and environmentally friendly turbines are proven solutions to help migrating salmon pass through the dams. The dams are the foundation of a thriving, environmentally friendly system underpinning a good portion of the Pacific Northwest in terms of transportation, clean energy production, recreation, flood control and irrigation.

Every cycle has a beginning and an end. It's time for Gov. Inslee and the Washington State Legislature to recognize the conversation around removing the lower Snake River dams has run its course.

Wheat leaders pleased to see Section 232 tariffs removed

From the National Association of Wheat Growers

The announcement recently that Section 232 tariffs on steel and aluminum imports from Mexico and Canada will be removed is an important step toward approval of the U.S.-Mexico-Canada Agreement on trade (USMCA), said farmer leaders of U.S. Wheat Associates (USW) and the National Association of Wheat Growers (NAWG).

"We thank the administration for recognizing that these tariffs are hindering trade agendas that open overseas markets," said USW Chairman Chris Kolstad, a wheat farmer from Ledger, Mont. "We also encourage repealing all the remaining steel and aluminum tariffs and oppose new tariffs on autos under Section 232. New tariffs would encourage our trading partners to retaliate against U.S.

farmers and agricultural exports and further weaken international trade rules."

The USMCA agreement includes important provisions for wheat farmers. USMCA retains tariff-free access to imported U.S. wheat for our long-time flour milling customers in Mexico, a crucial step toward rebuilding trust in U.S. wheat

as a reliable supplier in this important, neighboring market. In addition, the USMCA makes important progress towards more open commerce for U.S. wheat farmers near the border with Canada. The updated USMCA agreement would enable U.S. varieties registered in Canada to be afforded reciprocal treatment. While there are remaining challenges, we applaud the administration for negotiating this critical provision in the USMCA and taking a big step towards reciprocal trade along the U.S.-Canadian border.

"Leaders in Congress made it clear that the USMCA agreement would never be approved unless the tariffs on Mexican and Canadian steel and aluminum were removed," said NAWG President Ben Scholz, a wheat farmer from Lavon, Texas. "We want to remind members of Congress that the farmers in their states and districts expect support for this agreement. We are certain USMCA will bring jobs and economic prosperity to rural America and across the United States."

North Dakota grain group chooses to leave NAWG

It is with much disappointment to announce that the North Dakota Grain Growers Association (NDGGA) has decided to withdraw their membership from the National Association of Wheat Growers (NAWG), effective June 30, 2019. NAWG President Ben Scholz made the following statement in response:

"Despite tremendous effort and NAWG conducting hundreds of meetings with members of Congress and

the administration on behalf of all our states including North Dakota, NDGGA leadership has indicated they will leave NAWG. NAWG leadership and staff did everything possible to address NDGGA's concerns, from private briefings to ramped up communications to our states to traveling to North Dakota with a third-party facilitator to address issues, and yet they have still decided to resign their membership. As the president of a trade association, it always disappoints me when one of our members isn't pleased with productivity.

"In this case, NAWG went above and beyond to meet the concerns of NDGGA by giving them a national voice on Capitol Hill. NDGGA chose to put their own priorities ahead of the national organization, which is not how a national association can run effectively. The past two years, North Dakota put their interests ahead of all wheat growers across the country by withholding half their dues, making it difficult to carry out the overall mission of the organization.

"It is unfortunate that a major wheat-producing state, who provided unique insight into national policy and influenced others in the industry, won't be moving forward with NAWG." ■







Working to advance the small grains industry by building support for programs and activities that increase public awareness of farming.

2019 SCHOLARSHIP RECIPIENTS

One of the building blocks of the Washington Wheat Foundation's mission is education of the wheat industry. To that end, scholarships fuel both education and outreach.



The Michael and Linda Schrag Agricultural Education Scholarship is for college juniors and seniors who have declared agricultural education as their major and maintained a minimum 3.0 GPA during their college years. A Reardan High School graduate, Bailee Perleberg, is the recipient of this year's \$1,000 Schrag Scholarship. "Receiving this scholarship motivates me to continue going to school and pursuing a degree in agricultural education. I look forward to being able to give back to the community as well as surrounding communities once I begin my career in teaching," Bailee said. After graduation, Bailee plans to teach in the Pacific Northwest. While attending Washington State University (WSU), she is been active in the

WSU Agriculture Education Club and works at the WSU Meat Science Lab.

The \$1,500 **Washington Wheat Foundation Barbara Pyne-Herron Memorial Scholarships** are for college juniors and seniors. Preference for these scholarships is for

promising students with a rural and/or agricultural background pursuing a career in agricultural communications, agribusiness economics and management or agribusiness and technology systems and to students with a family member in the farming industry. This year's winners are Kendall Coppersmith and Andrew Gutierrez, who received a renewal from last year's award.

Kendall Coppersmith is majoring in agricultural technology and production management. After graduation, he plans to find an interesting and rewarding job in a rural area. He would like to be a field man for an operation in Eastern Washington and recently accepted an internship with BASF for the summer. Kendall is "truly grateful for the opportunity the scholarship has



given me. I am eager to use this scholarship to earn an agricultural degree and become an integral member of my future business community. I am positive that you have made a good investment in establishing the groundwork for my future in agriculture."

Congratulations and best wishes, Bailee, Kendall and Andrew!

WASHINGTON WHEAT FOUNDATION JUNE SHOOT

All sporting clay enthusiasts, it's time once again for the Washington Wheat Foundation June Shoot. The annual event will be held at 10 a.m. Friday, June 14, at Landt Farms in Nine Mile Falls, Wash. Landt Farms was the first sporting clays course in Eastern Washington



and is known for its scenic landscape and unique shooting course. Suited for both beginners and experts alike, the course offers a wide variety of targets that are changed regularly. Space is limited, so be sure to submit your entry and payment no later than June 7. Entries are \$90 for adults and for \$40 for youth, 4-H and FFA members. Entry fees include the shoot and

a catered lunch provided by Longhorn BBQ. For more information about entries or sponsorship information, visit wawheat.org/events and click on the June Shoot link. \blacksquare

Calendar:

- Washington Wheat Foundation's June Shoot June 14, 2019, at 10 a.m. at Landt Farms in Nine Mile Falls, Wash. Register by June 7. More information is at wawheat.org/events.
- Washington Wheat Foundation Meeting Sept. 16, 2019, at 1 p.m. at the Wheat Foundation Building in Ritzville, Wash.

Reminders:

- Don't forget, the National Wheat Foundation is accepting grower enrollment for the 2019 National Wheat Yield Contest! The spring wheat entry deadline is Aug. 1, with an early registration deadline of June 15. For more information visit wheatfoundation.org.
- Remember the Foundation in your charitable giving.

Washington Wheat Foundation

P.O. Box 252 Ritzville, WA 99169 (509) 659-1987 wawheat.org



This is a program of the Washington Association of Wheat Growers Contributions made in part by the Washington Wheat Foundation



On the Hill

TRADE, LABOR, FARM BILL IMPLEMENTATION TOP CONGRESSWOMAN'S AG PRIORITIES

Rep. Kim Schrier was elected last November in Washington's 8th Congressional District to replace retiring Rep. Dave Reichert. She has been appointed to serve on the House Ag Committee, as well as the House Education and Labor Committee. Her district includes parts of King, Pierce, Kittitas, Chelan and Douglas counties. Before being elected, Schrier worked as a pediatrician in Issaquah.

We wanted to get to know Rep. Schrier a little better and introduce her to *Wheat Life* readers. Below are a series of questions we asked the congresswoman on issues that are important to wheat growers and her answers.

What are your top three priorities for agriculture in Washington?

First, I will use my position in Congress to address the impacts of trade tariffs on our region. I'm very concerned about the current trade wars via tariff offensive and the impacts it will have on our farmers. Trade is a long-term relationship that our farmers have built. Once markets are closed, it can be difficult to near-impossible to get them back. We cannot afford to lose our export markets to competitors like Canada or Australia.

Second, although I'm not on the House Judiciary Committee, which has jurisdiction over this issue, I want to make sure our farmers have the workers they need for harvest. That starts with guarding and improving the H-2A program and creating a path to citizenship for workers already here but lacking documentation. Right now, there is too much uncertainty and a very high cost for farmers.

Finally, I would like to assist with farm bill implementation in general. I wasn't here when it was negotiated and voted on, but I'm here now during roll out. It is important that if our growers and farmers have concerns about farm bill programs, they reach out to my office and make sure I hear about it. I am here to help, and I intentionally pushed for a position on the House Ag Committee to be a voice for our region. It isn't fair to place demands on farmers without providing a support system. Fully staffing the Agricultural Research Service and the U.S. Department of Agriculture are priorities.

You represent a district of extreme urban and rural areas. Many times, these populations don't see eye to eye. How do



you balance that and represent people on both sides of the Cascades?

The 8th District has unique geography for a Congressional district. But I think it is a good representation of our state and country as a whole. While there are issues that may be of more concern to either end, like agriculture on the eastern side and traffic and public transportation in the urban areas, there are many more common issues we have in common. Every family, no matter where they live, wants lower health care and prescription drug costs; great quality public education for their children; and real action to address and protect from the growing threats of our changing climate. I represent the whole district and will focus on the needs of the middle 70 percent of us. There's more we have in common than you might think.

What would you tell farmers who are worried that you don't understand their priorities?

I'm here to learn. I want to hear from them. I appreciate their concerns that this family pediatrician may not be able to understand their issues. But I have made this a top priority and joined the agriculture committee with that in mind. One of my jobs as a representative is to legislate. But I think an even more important part of my new role is to listen. I have already visited multiple farms and orchards in my district and met with even more farmers, ranchers and orchardists in my district and D.C. offices. I look forward to this being an ongoing discussion with them. My door is open.







Your gift of grain will feed hungry people.

Washington Grain Growers Against Hunger, a partnership with Second Harvest, is designed to improve the lives of hungry families and seniors in our local communities.

How it works:

- Fill out Washington Grain Growers Against Hunger authorization form at your local elevator or contact (509) 252-6273.
- Gift a portion of the proceeds from your sold crop to Second Harvest.
- Return form and donation to your local elevator.
- All funds raised from Washington Grain Growers Against Hunger will be used to secure and distribute more food through Second Harvest's network of food banks and meal centers in the Inland Northwest.

"I believe we should dedicate some of our harvest to help hungry people. That's what my family is doing." Bruce Nelson, Whitman County Farmer

For more information about the program and an authorization form, see your local elevator, e-mail WGGAH@2-harvest.org or call Second Harvest at (509)252-6273.

Second Harvest • 1234 E. Front Ave. • Spokane, WA 99202 • (509) 252-6273 • 2-harvest.org





There's been a lot of talk about pesticides at both the state and federal level. Do you feel pesticide restrictions are adequate or do you see areas where they are lacking?

This question is very broad, and I will use evidence in each assessment. Like all of you, I want our farmers and families to be safe. Food safety is the #1 concern for all our farmers. Pesticides are just one tool farmers use to help protect crops. Responsible agricultural practices like crop rotation and utilizing technology like GPS are ways growers can minimize use of pesticides. We should also be mindful that pesticides kill the harmful and protective insects.

What are your thoughts on breaching the lower Snake River dams?

I recognize how critical this issue is to our state's wheat growers. Unfortunately, there isn't a single silver bullet to recover salmon populations. Ultimately, I consider myself a person of science. We have spent billions on salmon recovery efforts but aren't even close to being able to delist many stocks from the Endangered Species Act. In addition, Chinook salmon recovery is critical to orca survival. What I want to see is a thorough, honest study of salmon recovery options in the Columbia and Snake rivers along

with a cost-benefit analysis and a real assessment of the impacts on energy and agriculture.

Democrats in Congress have expressed reservations about the USMCA. Where do you stand on the issue, and what are you doing to help farmers who are being hurt in the current trade environment?

I signed a letter in March along with 22 other freshman members recognizing the importance of trade negotiations and requesting greater engagement with the administration. Since then, Ambassador Lighthizer and his staff have been very willing to meet and talk about concerns centered around labor, environment and access to medicines. I'm hopeful that we are getting to a good place where we can see a deal done because our farmers and the entire state of Washington depend on trade agreements, and the tariff wars have been incredibly destructive.

Is there a specific area that you plan to focus on while serving on the House Ag Committee?

As the only member on the House Agriculture Committee from Washington state, I am looking to be a voice for our region's farmers.



A REPRESENTATIVE ROUND TABLE. In April, Rep. Kim Schrier (in center at head of table) met with agricultural stakeholders, including the wheat, potato and wine industries, Washington State University and the Washington State Department of Agriculture to talk about the issues facing the state's agriculture industry. Michelle Hennings, executive director of the Washington Association of Wheat Growers (WAWG), Marci Green, WAWG past president, and Mary Palmer Sullivan, vice president of the Washington Grain Commission, talked about the need for favorable trade agreements and quick implementation of the 2018 Farm Bill.



Rental Includes:

Seats 100 • Full service kitchen • Wi-Fi Free coffee and tea • Pull out wall divider 2 large screens • Free parking 18 x 22 lobby to gather or serve buffet Separate board meeting room (seats 12)

\$50 (0-4 HOURS) OR \$100 (4+ HOURS)

Contact Chauna Carlson at the Washington Wheat Foundation rental line (509) 659-1987



SEEKING FARMS & RANCHESFor Purchase In Washington & Idaho



WE CAN SELL YOUR AG PROPERTY

- Our buyers are looking to purchase farm and ranch properties up to \$50,000,000 in value
- We have over 100 years combined ag experience
- Go with the team that has knowledge and dedication
- AFR affiliation offers unprecedented visibility for listings
- Need a current market evaluation? Contact us today!

The Team You Can Trust

Blaine Bicklehaupt 509-520-5280 blaineb@bluemountainrealtors.com

Mark Grant 509-520-1906 mark.grant@heritagelandgroup.com

Dayton WA 254 E Main St. 509-382-2020 **Walla Walla WA** 317 N. Colville St. 509-524-9055

www.bluemountainfarmandranch.com



Nitro 7000 Series

- Spray later into the growing season
- Adjustable Chassis With Up to 78" Clearance
- Quick, Easy On-The-Go Adjustments
- Cover More Acres In Less Time
- New FPT 310 HP turbocharged engine
- New Spacious Ultra-Quiet Cab
- New Chemical Injection Option Allows use of up to 3 injection pumps and 4 separate mid-mount tanks. When used with the main water tank, you can easily vary applications.
- Optional Auto Rinse allows you to clean out the tank and boom with the press of a button.



Your Miller NITRO Dealer in the West Please call 877-253-WEST (9378) or Greg at 541-786-1000

10200 Wallowa Lake Highway La Grande, OR 97850 **541-963-9378** 84083 Alpine Ln Joseph, OR 97846 **541-432-9378**

206 W Main St Dayton, WA 99328 **509-382-3022**





TARGET ACQUIRED

Benton County farmers, conservation district team up on precision application project

By Trista Crossley

In the ongoing fight against weeds, one Benton County wheat farming family feels like they've hit the spot by employing a precision technology that saves them 80 to 90 percent on their chemical costs.

"To me, this is the next best thing after autosteer for a return on investment," said Devin Moon.

Moon and his brother, Garrett, saw a demonstration of the WEEDit technology last year and were impressed enough that they approached the Benton Conservation District (BCD) with a proposal for a pilot project to test the system in a no-till fallow rotation. The WEEDit system works by detecting small amounts of chlorophyll and precisely applying chemical to just that spot. According to their website, the WEEDit technology was invented in Holland in 2001 as a way to avoid applying a "blanket" of chemicals over roads and footpaths to kill weeds. In 2009, the technology was modified for use in agriculture with the first system sold in Australia that same year. The

Moons purchased the system, which mounts on their existing sprayer, and the conservation district provided some financial assistance for the actual work, i.e. labor, fuel and chemicals. The project began in July 2018 and wrapped up in April.

Melissa Pierce, resource conservationist with the BCD, said the project appealed to the conservation district because many farmers in the Horse Heaven Hills are converting to no-till fallow rotations, which means tillage is not an option for weed control. The Moons were targeting Russian thistle, prickly lettuce and horseweed with the system.

"With not using tillage anymore, farmers need to use chemicals to control weeds, and they are starting to notice some chemical resistance," she explained. While farmers see the savings in chemical costs, the BCD sees potential savings in other areas. "From a conservation district or natural resources point of view, using less chemicals means less impact on natural resources. Another benefit to



The WEEDit equipment uses chlorophyll-sensing technology to identify weeds and apply herbicides only where needed as demonstrated in this photo courtesy of Jason Emerson of the Odessa Trading Company/Vantage-PNW.

natural resources is just being able to make notill fallow rotations a more sustainable practice."

Some of the benefits that the BCD expects to see from this sort of technology are less volatilization of the chemicals and less potential for herbicide drift. Less tillage also means fewer impacts on air quality and soil erosion.

The Moons had previously used weed-seeker technology, but were unimpressed. Devin said he was initially wary of the WEEDit technology until he saw it demonstrated.

"It was an 'ah ha moment' watching this thing spray dime-sized weeds in stubble," he said. "It was impressive. Weeds are tougher now to kill chemically than even five years ago, and it's only going to get increasingly hard. This made a lot of sense." He added that he was impressed with how well the system, mounted on his 120-foot sprayer boom, handled turns.

Before he saw it working, Moon said he was skeptical of saving enough money on chemical costs to make WEEDit a sound investment. He explained that it's easy to overestimate how weedy a field really is when spraying with a traditional sprayer.

"You'd think it is covered with weeds, but it's really only 20 to 30 percent. I had a field lousy with Russian thistle. I took WEEDit through it and still saved 70 percent on chemicals," he explained. "It's just worked better than anticipated.

Moon said the fact that the system works through stripper header stubble is only one of the benefits he can see. Because of the cost savings, he anticipates being able to use different herbicide modes of action that he otherwise might not be able to afford, which will help with weed resistance. Another benefit is that the system can detect weeds when they are very small and easier to kill, helping combat weed resistance. Killing the weeds before they grow also helps keep more moisture in the ground.

Moon said the BCD was good to work with, because unlike the Natural Resource Conservation Service (NRCS), conservation dis-



The WEEDit equipment that Devin and Garrett Moon used attached to their sprayer, just like these two photos demonstrate. Photo courtesy of Jason Emerson of the Odessa Trading Company/Vantage-PNW.



tricts are generally more flexible and the projects they support tend to have less strings attached.

"Lot of times NRCS programs are very rigid, and the conservation district...you can take an idea to the board, and lot of times, they can decide the same day if they are going to support it or not," he explained. "Less herbicides...that's a great thing for the conservation district to get behind. If they are going to pony up money and have to defend to the public why they are supporting something, who's going to complain that we are using less chemicals?"

"To me, this is the next best thing after autosteer for a return on investment."

—Devin Moon



Educational outreach

WAWG, OTHER AG STAKEHOLDERS TAKE PART IN LINCOLN COUNTY CONSERVATION DAY

By Trista Crossley

Educating farmers is one important facet of the Washington Association of Wheat Growers' (WAWG) mission. Educating the next generation is another.

Every winter and spring, WAWG volunteers, leaders and staff man booths at farm fairs and give presentations at school and conservation district ag days, showing students how the wheat that covers Eastern Washington grows, where it goes after harvest and what it is used for. One of the most popular sections is a game where students guess which foods have wheat in them (red licorice usually stumps them). The effort to educate Eastern Washington students might seem wasted, as those same students often grow up surrounded by wheat fields, but, surprisingly, many of them don't come from farming families, said Marci Green, chair of WAWG's Public Relations Committee. Green and Lori Williams, WAWG's Outreach Coordinator, are the ones usually responsible for these types of outreach efforts.

"It used to be that if you grew up in a rural part of Eastern Washington, your family was probably involved in farming in some way," Green said. "But these days, families who aren't farmers are moving to rural areas for the quality of life those areas offer. They are surrounded by agriculture but may not understand things like how grain is grown or why we use pesticides. Participating in these school events gives us a chance to expose those kids to agriculture, and we hope, in turn, those kids will share what they learned with their parents."

In May, WAWG took part in the Lincoln County Conservation Day, which is an annual event that brings hands-on learning to the county's sixth graders. The event has become something of a rite of passage for Lincoln County students, said Valerie Vissia, communications coordinator for the Lincoln County Conservation District in Davenport, Wash. The conservation district coordinates the event. This year, approximately 135 students from five different schools took part.

"Everything went great," Vissia said, about the half-day event. "Every year we talk about switching it up or doing something different. Part of you says yes, but then it's something so special for us, so specific to us. There's not too many other conservation districts or counties that do



Curt Woods from the Washington State Department of Fish and Wildlife talks about using animatronic animals to catch poachers.





(Above, left) A student is shown how to use an atlatl, an old device for throwing spears farther and harder, by Anne Boyd of the U.S. Bureau of Land Management. (Above, right) Students got practice using a fire extinguisher to put out fires in the presentation by the Reardan Fire Department.

this. We do try to keep it updated, bring in new presenters, do something different, but at the same time, when you have somebody whose parents have gone to it, you want to try to keep that same experience. Sometimes, if it's not broken, don't fix it. Maybe just bend it a little."

This year, students saw presentations that included the Missoula Floods by the Natural Resources Conservation Service's Lincoln County office; how to use a fire extinguisher to put out a fire by the Reardan fire department; downed power poles by Inland Power and Light; and identifying species of trees by the Washington State Department of Natural Resources.

Vissia said one of the most popular demonstrations this year was put on by the U.S. Bureau of Land Management (BLM), who usually focuses their presentation on archeology and recreation. This year, students got to shoot a bow and arrow, and practice throwing using an "atlatl," a tool that helps users throw a spear farther.

"That was a great way of explaining the history of how this weaponry came about," she said.

WAWG focused their presentation on the harvest and exporting aspects of wheat farming, as well as the game of guessing which products have wheat in them. They also touched on conservation methods employed by wheat farmers.

"It's rewarding to see the interest in agriculture that these kids have," Williams, who gave the WAWG presentation, said. "Hopefully we are giving them something to think about, so the next time they see a tractor or combine in the field, they understand what is happening and why."

> PHOTOS BY DEAN WHITE, WATER AND SOIL RESOURCES TECHNICIAN, LINCOLN COUNTY CONSERVATION DISTRICT



Lori Williams, outreach coordinator for the Washington Association of Wheat Growers, talks to students about how wheat is grown and



Washington Department of Natural Resources' Nick Jeffries, and his daughter, London, showed students how to use foliage to identify tree species.

WL PROFILES

Bringing NRCS projects to a farm near you

Tracy Hanger helps implement conservation practices statewide

By Kevin Gaffney

Growing up on a wheat farm in Dayton, Wash., **Tracy Hanger** envisioned a career as a veterinarian.

Graduating from Dayton High School in 2000, she earned a bachelor's degree in animal science from Washington State University (WSU). Having already discovered that performing surgery on animals was not her forte, Hanger found employment on a beef cattle feedlot. That summer, she went back home to work harvest with her dad, and she realized just how much she missed working in small grains production.

"It just hit me that the cattle-dairy industry wasn't the best career track for me," remembered Hanger. "I discerned that I wanted to work with grain farmers as my life's work."

The year 2006 found Hanger back at WSU earning her degree in crop and soil sciences in only one year, while also serving an internship with the Natural Resources Conservation Service (NRCS) with Dennis Roe while at WSU and that summer in the Ephrata office.

"Following my internship, my first full time NRCS position was as a conservation field agronomist at Ephrata," said Hanger. "After a couple years, I moved to the Pasco office and transitioned to the soil conservation position. It was basically a lateral move, but it brought me closer to home and to the small grains industry."

After about three years in Pasco, a dream-come-true position popped up. Hanger's goal was to become an area conservation agronomist working directly with growers in Eastern Washington.

"However, the Eastern Washington area agronomist position was combined with the state agronomist billet in the ecological sciences division, so I had a major decision to make. I decided it was too good an opportunity to pass up. I applied, and was hired for that dual position in 2012.

"Originally, I had planned to serve at the area position level and avoid the politics of a state office job, but it was my only path to the area agronomist position, and I'm still serving in that dual role today."

There were some challenges for Hanger when she first took over the state conservation agronomist position at the age of 30. She had to prove herself to the rest of the staff with her knowledge and skills. As state conservation agronomist for the ecological sciences department, Hanger works with NRCS field and office staffs in all three areas in Washington state. The state is divided into western,



central and eastern areas. Hanger provides direction and focus for all three. Her work also involves working directly with several state agencies, including the Washington State Department of Agriculture, the Department of Ecology (Ecology) and with WSU Extension.

"I'm responsible for all of the agronomy information that comes through the NRCS state office and is delivered to all of our field staffs," explained Hanger. "I don't get to work directly with farmers on a one-to-one basis, but if our field offices are successful with the farmers in the field, then my job is being performed properly."

Due to a recent retirement, Hanger is currently also covering a detail position supervising five southeast Washington counties. Her daily work involves quite a bit of travel and a whole lot of phone time.

"NRCS promotes voluntary conservation and stewardship practices for farmers to implement on their farms. We have sets of conservation standards, which can vary greatly by soil types, crop rotations used and the terrain of the farmland.

"We have what we call local teams, and we work with the leaders and staffs of those teams statewide. NRCS currently has approximately 130 employees in Washington state, and with many retirements, keeping positions filled will likely be an ongoing issue."

Hanger gets much satisfaction with each conservation plan implemented on farms, especially in the eastern region with which she is most familiar.

"I've never met with a farmer who was not conscientious about soil conservation practices," Hanger said. "They are often only limited by their knowledge of which practices will work best or by the financial limits of what they can put into place on their farms.

"We hold educational workshops to help the farmers understand the programs and practices better. Many farmers adopt more conservation after watching neighbors successfully implement conservation practices on their farms.

"Sometimes, financial considerations come into play. But when the long-term benefits derived from improved soil conservation practices are considered, that can help growers to decide it is worth the costs involved. There are also cost-sharing programs to help farmers establish conservation practices."

Hanger's schedule is hectic, but having the work ethic of a farm kid, she thrives on staying busy, even if it gets a bit crazy at times.

"NRCS practices are all voluntary, unlike the regulatory role of Ecology," noted Hanger. "But we basically want to attain the same thing: clean air and water. Ecology will consult with us on programs they are planning to institute. Working together can make things better for the agencies and the farmers.

"I do feel fortunate to be on the voluntary side of the equation. It is very satisfying to help design programs for people who want to improve soil conservation on their farms. We have a multitude of assistance programs designed to help improve land and soil management, protect and improve water quality, maintain and improve wildlife habitat, diversify farm operations and to apply sustainable ag practices.

"We have such an amazing, diverse mix of crops in our state. Fortunately, it has been my experience that all around our state, there is great interest in taking care of agricultural land, regardless of crops grown or the region of the state."

One of Hanger's favorite facets of her work is seeing actual changes when improved conservation practices are established. She enjoys seeing the results of the field office staffs helping growers in their farming operations.

When asked about new conservation practices, Hanger mentioned that minimum tillage and direct seeding are making a huge difference on many farms. Diversifying rotations, employing cover crops, monitoring soil moisture and health and adopting the use of precision agriculture technology and equipment are all bringing progress to improving soil conservation all over the state.

Since 2015, Hanger lost her father to cancer, but she also gained a husband, Pat Davidson. They had attended elementary school together, but it took a meeting 15 years later for the sparks to ignite their romance. Hanger still takes time off each year to go back to Columbia County and participate in harvest.

"I do miss living and working on the land," she said. "It's important to me to keep an active connection to the land. I think most farm family members understand that relationship. It's more than just a job, it's a way of life."

For details about NRCS conservation programs, go to nrcs.usda.gov.



One of the teams at the old-time plowing event in Davenport last month. See more pictures on pages 46-47.

IAIRMAN



WASHINGTON GRAIN COMMISSION

In last month's issue of Wheat Life, I pondered how much, if any, the prevented plant provisions of our crop insurance might be used. Once winter broke, planting in Eastern Washington went full tilt, with little evidence that acres would remain unplanted. Wheat Life also featured a great article on planting woes, but it appears we have dodged that bullet once again. Now, on with the topic at hand.

The National Agricultural Statistics Service released its 2017 Census of Agriculture report on April 11. One statistic I have followed with interest is the average age of farmers. In the 2012 census, I was right at the average age, but now I am above the current average age of 58.1. I'm disappointed that the spread wasn't greater (the average for the nation was 57.5 in 2012). Like any industry, farming needs new blood to survive and thrive, and we are slowly making progress. Nearly 30 percent of producers in Washington are 35 years old or younger, with Franklin and Benton counties leading the way.

Part of the reason the average age continues to rise (in the 2012 Census in Washington it was 56.8) is because farming isn't a typical 8-to-5 job that you retire from at 65. Older farmers are often part of a family operation who continue to provide continuity and wisdom for those that follow, even when their active farming days are over.

As part of the recent census, four individuals may be involved in a single farm's decision making (up from three in 2012), and 87 percent of those older than 65 reported that they are helping make day-to-day decisions on their operations. As someone who worked with my dad until he passed away at 81, I was grateful for the insight his many years of farming experience provided our operation. I hope for a similar scenario as I move closer toward retirement.

Given that my brother and I recently brought his daughter, Erin, into our operation, here's another interesting statistic from the census. In Washington, 42 percent of farmers are female. That's 15 percent greater than the national average. Although Erin spends a fair amount of time doing the traditional chores of planting, spraying and harvesting, I suspect she will be particularly valuable when it comes to technology, marketing and the ongoing (and laborious) tasks of keeping up with paperwork!

Yet another interesting statistic from the census is the

number of veterans working on farms in Washington. Thirteen percent of Washington farmers had military service compared to 11 percent in the U.S. In Eastern Washington, the county with the largest proportion of vets was Spokane County, where 635 farms had at least one individual who served in the military.

There is a lot to like about how the census is put together, and I'm a fan of the effort. But, I do feel the dollar amount of sales required to be included needs to be raised to something that more closely reflects those who are farming full time, versus those who have what I call hobby farms. In 2017, \$1,000 worth of sales was enough to be considered a farm, a level that was established in 1974. But factoring in inflation, \$1,000 in 1974 dollars is only worth \$193

That brings me to my next point. According to the census there are 2,042,220 farms in the U.S., but just 105,453 of those—or 5.2 percent—account for 75 percent of the sales. I realize there are political ramifications to boosting farm numbers as high as possible, but I believe if we really want to count farms in the U.S., then a minimum value of \$10,000 would be more reflective of how the nation is actually feeding itself.

today.

In Washington, the census reports a total of 35,793 farms. But just 942 farms represent 75 percent of sales. Of those, 443 are involved in the fruit industry, hardly a surprise since Washington is a leader in high-value tree fruit production. In fact, if you lump fruit and berries together, they account for more than 37 percent of the state's agricultural value. Small grains, meanwhile, accounts for 10.2 percent, ranking our favorite crops No. 5 on the list of commodity value.

Out of the 2.26 billion acres of land in the U.S., about 900 million acres are devoted to farming, a number that declined by 1.6 percent between 2012 and 2017, to 40 percent of the total. That's the lowest share of land dedicated to agriculture since the 1910 census. Every year more land faces it's final rotation, which is usually concrete or asphalt.

The once-every-five-year Census of Agriculture is truly a monumental effort, and it takes a while to compile the 6.5 million data points into a report worthy of release, which is why the 2017 Census was released in 2019. But it's not just a collection of numbers, it is the history of agriculture, and how it has changed over the years.

KEVIEW WASHINGTON GRAIN COMMISSION

Herbicide Armageddon

Herbicide resistance is being expressed by weeds throughout the Northwest, but the region still lags the Midwest when it comes to the worst examples of the phenomenon. In Indiana, the related weeds Palmer



amaranth and waterhemp are now resistant to seven—SEVEN!— herbicide modes of action: Groups 2, 4, 5, 9, 14, 15 and 27. The first resistant waterhemp appeared in the state in the early 1990s. Many farmers now are dealing with waterhemp that has three-way resistance. **Drew** Lyon, extension weed scientist at Washington State University, said the same thing could happen in Eastern Washington if farmers are not vigilant with regard to rotating modes of action. Or as he put it, "Relying on a single mode of action for weed control until it no longer works,

and only then switching to another mode of action, is the proven recipe for developing weed biotypes resistant to multiple modes of action. To avoid or delay the development of multiple herbicide-resistant weeds like Palmer amaranth and waterhemp, growers must routinely rotate and/or combine effective herbicides with different modes of action."

Nitrogen fixation: Fact or fiction

Nitrogen is all around us, and while plants need it to make proteins and DNA, they have never evolved the biochemical equipment to "fix" nitrogen for their own use. Legumes have solved the problem by encouraging bacteria that fix nitrogen to live on their roots, going so far as to develop root nodules to encourage cohabitation. Doing for wheat what legumes have evolved is part of a University of Wisconsin-Madison project that seeks to recapitulate a fortuitous coincidence that occurred 60 million years ago between the symbiosis genes and root formation genes of an ancient type of legume. This will be accomplished by genetically tweaking the evolutionary process to speed things up. It turns out there are already examples of corn and sorghum plants that fix nitrogen. In Mexico, a type of corn that stands nearly 20 feet tall when fully grown does not need fertilizer to flourish. It puts out aerial roots that do not absorb water, but rather hosts nitrogen-fixing bacteria. When conditions are damp, these roots ooze a gel that drips onto the soil. Analysis has shown the gel is fixing nitrogen. Nitrogen-fixing aerial roots have also been found in sorghum.

Not wheat's fight. Phew!

Since 2007, the change in consumer concern and avoidance of all things GMO has risen sharply in the U.S., according to The Hartman Group, an authority on consumers, culture and trends for food and beverage brands. The proportion of consumers avoiding GMOs almost tripled to 46 percent by 2018, compared to only 15 percent 11 years earlier. The GMO negativity is part of a broader societal shift toward eating food that is closer to its natural form and less changed by human manipulation. Consumers imagine that eating foods made by nature reclaims an imagined time when food production was simpler and safer. Concern about GMOs are fueled by discomfort with the idea of natural products being changed into something unnatural; distrust of big businesses with profit motivations; and uncertainty about the long-term consequences of GMOs on people and the environment.

Hurry up and wait

The USMCA trade agreement between the U.S., Canada and Mexico was agreed upon by all parties several months ago, but it cannot go into effect without the approval of Congress. Since the trade treaty was negotiated, however, Democrats have become the majority party in the House. They believe the treaty needs more environmental and worker rights protections. How their reservations can be addressed is anybody's guess, but it is imperative they be resolved because getting a bilateral deal with the Japanese through Congress depends upon it. Or, as a Washington Grain commissioner put it, comparing the USMCA treaty passage to life on a ranch, "It's like a cow getting stuck in a cattle chute. Ain't nothing get-

Knowledge is podcast power

The Washington Grain Commission (WGC)sponsored Wheat All About It! podcast has recently posted episodes involving the weather, economics, trade, wheat quality, insects, a Snake River lock and falling numbers. In episode 116, learn what long-range



weather forecaster Art Douglas has to say about a hot summer ahead. In episode 117, Washington State University economist Randy Fortenbery points out as bad as some farm indicators are, we are not close to conditions that occurred during the 1980s. In episode 118 and 119, U.S. Wheat Associates President Vince Peterson discusses the current trade environment, and what it means for wheat. In episode 120, Steve Joehl, director of the National Wheat Yield Contest, explains how missteps occurred as he discusses a revamped contest that will include some quality parameters. In episode 121, the University of Idaho entomologist Sanford Eigenbrode talks about the decline in insect biodiversity, and what it means. In episodes 124 and 125, join WGC director of communications and producer relations, Scott Yates, as he tours the lock at Lower Monumental Dam. And in episode 125, you don't want to miss Agricultural Research Service scientist Stephen Delwiche talking about the new falling numbers protocols that will be used during the 2019 harvest. Episodes are available at the WGC website, wagrains.org, under summaries. If you have an iPhone, press the podcast icon on your home screen and type "Wheat All About It!" in the finder. Otherwise, download a podcast app (Stitcher is one of many) and search for the show.

A rising tide, etc.

It's always positive when U.S. wheat obtains a more level playing field in countries around the world, most recently in Brazil, where President Trump and President Jair Bolsonaro of Brazil agreed to implement a duty-free tariff rate quota for wheat. The agreement opens up an annual opportunity for U.S. wheat farmers to compete for 750,000 metric tons of wheat under a tariff rate quota (TRQ). Brazil was the largest wheat importer in Latin America and the fourth largest in the world in marketing year 2017/18. Until now, wheat purchased from countries outside the South American Mercosur agreement had a 10 percent duty imposed on wheat coming into the country. Although distance makes it unlikely Brazil would ever be a Pacific Northwest customer for grain, this region's wheat is actually prohibited from being exported to Brazil over fear of Flag Smut, a disease that seed treatments have eradicated from the Northwest.

Proactive education

What do you get when you combine the words "Innovation" and "Nature"? How about Innovature? That's the name of a new effort to educate the public about the value of advanced plant breeding techniques like gene editing. Go to the Innovature website at innovature.com to find out more about the partnership between the American Seed Trade Association and BIO, the world's largest biotech trade association. The goal of the new project is to avoid the problems that befell GMOs because Monsanto did not educate the public about genetically modified organisms until it was too late. By engaging key influencers in a conversation around shared values to explore how gene editing can improve our planet, our health and our food, the project aims to move the needle toward support in the U.S.

Got bread?

It's just a matter of time before a flour check-off is up and running. Christine Cochrane, executive director of the Grain Foods Foundation, spoke at the U.S. Wheat Associates winter meeting about the initiative, which could generate as much as \$16 million a year for promotional and other activities. The flour assessment will be directed toward the bread and rolls segment and will exclude soft white wheat. Millers and bakers are concerned about tepid flour disappearance and are hoping to ramp up interest in baked goods.

A marketing opportunity



Thanks to the Agriculture Trade Promotion Program (ATP), a three-year initiative intended to help U.S. agricultural exporters develop new markets and help mitigate the adverse effects of other countries' tariffs and nontariff barriers, U.S. Wheat Associates' (USW) budget will rise from \$16.3 million in 2018 to \$19.3 million, according to **Vince Peterson**, the organization's president. More good news is the additional \$700,000

in Foreign Market Development funds the organization received. The 2019 budget raises the number of times producers' funds are matched from 1.7 to 2.4 times. Grower dues provide \$5.3 million of the budget, which includes the Washington Grain Commission's \$462,000 membership. ■

LEAVE Land Legacy

The late Washington State University President Elson S. Floyd once stated, "the day we begin to take our agricultural legacy for granted is the day that we will begin to lose it."

This vision, along with a desire by Washington farmers, ranchers, and forest owners to keep their land in production, helped create the Washington State University Land Legacy Program.

Aimed at preserving and sustaining productive agriculture land, the Land Legacy Program ensures working farms remain working farms, while the University manages the land for long-term sustainability.

In keeping with the tradition once laid by Orville A. Vogel, the Land Legacy Program allows for outreach, research, and prosperity for the University and producers alike. With nine successful Land Legacy Farms in production, the legacy of philanthropy and partnership between the grain industry and WSU will continue for years to come.

In the pages ahead, read about one of the newest Land Legacy supporters, retired Palouse farmer Glenn Leitz. Inspired by his friend and neighbor, the late Lorenz Bohrnsen, and following in the footsteps of Dr. Vogel, Glenn is supporting research that grows the future of Washington wheat.



Taking the long view

Farmer friends' legacies help future generations of wheat growers

Wheat farming on the Palouse has changed in many ways since Glenn Leitz took over his family's Waverly, Wash., farm in 1955.

But across four decades of farming and twenty years of retirement, one thing has always stayed the same for Glenn. He's always taken the long view, putting the needs of tomorrow over today's convenience.

Inspired in part by his late friend and neighbor Lorenz Bohrnsen, Glenn has chosen to donate his farm to benefit agricultural research through Washington State University's Land Legacy Program. Profits from the land will help develop better wheat varieties, defenses against pests and pathogens, and other farmer-supporting discoveries at WSU.

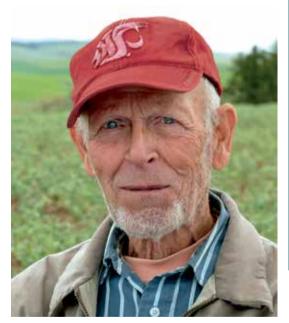
Farming with an open mind

"I never thought, when I went away to college, that I would come back to farm," said Glenn, 88, a 1952 agriculture alumnus from then-Washington State College.

But, after a two-year stint in the U.S. Army, family matters led Glenn to return home and take over his parents' farm in their retirement. There, his education opened his mind to explore new practices, in particular, soil conservation.

"That's part of what a college degree in agriculture should do: Give you the ability to think long-term!" he says.

That interest in stewardship spurred a lifelong friendship with his farmer neighbor, Lorenz Bohrnsen.



A college degree in agriculture should give you the ability to think long-term!

~ Glenn Leitz



Both sons of German homesteaders, Glenn and Lorenz grew up amid big farm families that cherished hard work and respect for the land.

A decade older, "Lorenz was a very progressive, hard-working farmer and a sharp guy," Glenn remembered.

The Green Revolution

By the early 1960s, Palouse farmers were beginning to benefit from the discoveries of USDA wheat breeder Orville Vogel, based at WSU.

Vogel's new semi-dwarf wheats, such as Gaines, released in 1961, grew on short, strong stems. Fueled by fertilizer, they could grow bigger, heavier heads of grain without falling over, dramatically boosting yields in what was dubbed a "Green Revolution." Naturally, Glenn and Lorenz joined in.

"Gaines wheat was a godsend to farmers," Glenn said.

With their mutual interests, Lorenz and Dr. Vogel "hit it off and became friends," Glenn said. What bonded them was a shared, long-term perspective.

It's not always easy to see the benefits of decisions made with the distant future in mind, says Glenn.

"But Lorenz was capable of doing that," he said.
"Even though he didn't have a family, Lorenz could see the benefits of being a good steward to your land. He and Vogel both saw that as important."

Vogel, who died in 1991 at age 83, spent years building a WSU endowment for wheat research. He went on the road to ask farmers to give back, matching their contributions and making the first \$26,000 donation. The fund now stands at more than \$4 million.

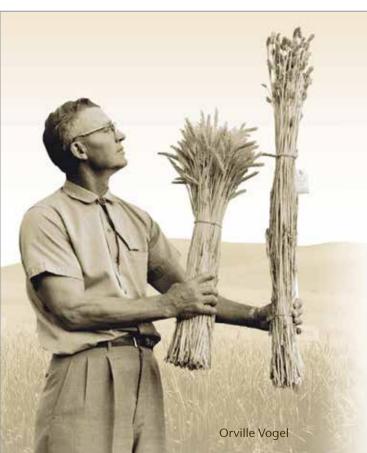
Created to spur basic and applied research into crop yields, the Orville A. Vogel Wheat Research Fund is an important nursery for new ideas. For more than 20 years, it has helped WSU researchers build new collaborations and fill knowledge gaps that solve major challenges facing Pacific Northwest wheat growers.

Gift that keeps giving

Lorenz, who died in 2003, donated his thousandacre farm to WSU in 1990. Through the Land Legacy program, profits from his land support the Vogel Fund, as well as the scientists that continue Vogel's work today.

Now, Glenn is following his friend's example. "WSU's forté, back to its very beginnings, is agriculture," he said. "Research has always been a terrific boon to Washington farmers. That was my biggest incentive to leave my land to the university.

"We've got to take the long-term view to leave behind farms that are productive and healthy," Glenn added. "It's a necessity."



LEAVE Land Legacy

To learn more about the WSU Land Legacy program, please join us on June 25, 2019, at 5:30 pm, at the Harvester Restaurant in Spangle, Washington.

Michael Neff, Director of the Molecular Plant Sciences Graduate Program and WSU Professor of Crop Biotechnology, will present new agricultural research on biotechnology. The event includes a buffet dinner and celebration of Glenn Leitz's donation and legacy.

If you would like to attend, please RSVP to Jessica Munson at (509) 335-4172.



Learn more about how gifts of land support wheat discoveries at WSU: legacyofland.wsu.edu

WSU Land Legacy Farms

- BOHRNSEN FARM Donated by Lorenz Bohrnsen | 1,022 acres Supports Vogel Endowed Chairs and Vogel Wheat Research Fund
- 2 R. JAMES COOK AGRONOMY FARM Donated by Earmel Cunningham Trust | 351 acres total Farms support precision agriculture and direct seed research and animal science farm program
- FERNE DANIEL FARM Donated by Ferne Daniel | 640 acres Supports Daniel Family Endowment for wheat breeding/farming
- 4 CLEORA NEARE FARM Donated by Cleora Neare | 989 acres Supports Lind Research Station
- S ROBERT SCHMIDT FARM Donated by Robert Schmidt | 216 acres Supports sustaining agriculture and natural resources
- **6** SCHROEDER FARM Donated by Carl and Margaret Schroeder | 118 acres Supports Schroeder Family Trust—50% Engineering and 50% CAHNRS scholarships
- **7** TWIN VISTA RANCH Donated by Lisa Painter | 26 acres Supports WSU Jefferson County Extension
- 8 VALESKA FARM Donated by Irene Valeska | 114 acres Supports Hattie Davis Espy Memorial scholarship
- WILKE FARM Donated by Beulah Wilke | 342 acres Supports research for cropping systems in medium rainfall zones





REPORTS

WASHINGTON GRAIN COMMISSION

Fusarium crown rot is prevalent, persistent, pernicious

By Timothy Paulitz and Kimberly Garland-Campbell USDA-ARS Wheat Health, Genetics and Quality Research Unit

Fusarium crown rot of wheat is probably the most widespread of all root and crown diseases in the Pacific Northwest. It is found in all precipitation zones and cropping systems—from conventional to no-till. It causes an average of 10 percent yield loss most years, but can be as high as 30 percent.

The disease causes a characteristic chocolate-colored browning of the lower stem and roots (Figure 1). Under high disease pressure, the fungus can block the flow of water and nutrients to the heads, resulting in white heads and shrunken kernels.

Survey work done as part of the Ph.D. thesis of Grant Poole, sponsored by the Washington Grain Commission (WGC), showed that there are two species present in more than 90 percent of the fields, sometimes with both species together. These are the fungi *Fusarium pseudograminearum* and *F. culmorum*. Both species attack mainly grasses and cereals such as wheat, barley and oats. Unfortunately, these fungi can persist in the soil in the absence of a grassy host. They can survive in wheat residue, and *F. culmorum* can form thickwalled spores called chlamydospores that survive in the soil for more than seven years.

This disease is especially serious in water-stressed or drought-stressed plants, which causes the pathogen to spread in the crown and causes white heads. One of the cultural management methods used for more than 30 years is to avoid water stress caused by overfertilizing with N in excess of projected soil water. This causes large amounts of vegetative growth and then depletion of the soil water supply.

The best long-term solution is genetic, but it is also one of the most difficult

FIGURE 1. Fusarium culmorum infected crowns of wheat. The disease rating scale is illustrated with the figure on the left (rated 0) showing little or no browning and the figure on the right (rated 10) showing several browning and loss of integrity. Photo by Aichatou Djibo Waziri

to attain. This disease is also a major limitation in Australia and North Africa. Australia has devoted tremendous research resources to develop genetic resistance over the last 30 years, but have only obtained some moderately tolerant varieties. Unlike rust resistance, there are no major genes, but many minor genes that have to be combined. There is also a strong genotype X environment interaction, which makes it difficult to consistently rate in the field year after year.

What progress have we made the last few years, thanks to WGC funding?

Using a mapping population from a cross with Sunco (an Australian parent) X Macon and Otis (two Pacific Northwest varieties), Grant Poole found several minor genes (QTLs) for resistance to F. pseudograminearum, including one on Chromosome 3B. Expanding on this, Yvonne Manning, as part of her Ph.D. thesis, rated a diverse global spring wheat collection for resistance. A complete range of responses was discovered with scores ranging from 0 to 10 among the 600 accessions. Marker trait associations (MTA) were identified on chromosomes 1A, 2B, 4D, 5A, 6B and 7A. Chromosome 2B, 4D and 7A may reflect novel sources of resistance.

Because of the difficulty of working with the disease in the field, we screen most of our material in the greenhouse by growing the fungus on millet seed and inoculating seedlings in containers. Yvonne Manning optimized the disease

expression by modifying the procedure to more closely mimic diseasefavorable conditions in the field.

We grow the seedlings at cool temperatures initially and inoculate at high humidity. The temperature of the growth chamber is increased gradually, and drought stress is imposed as the plants mature. This has resulted in higher, more consistent disease readings. With this method, we are now able to screen hundreds of early development material and existing varieties, with the goal of finding the most highly susceptible so these can be avoided.

Eventually, we need to screen in the field. A previous master's student, Dylan Larkin, assessed disease in variety testing sites under natural inoculum in the intermediate precipitation area (Harrington and Reardan) for two years. However, the results were confounded by eyespot (strawbreaker foot rot), which can also cause a symptom on the lower stem that could be confused with Fusarium crown rot.

In 2018, we started a natural Fusarium nursery at Lind, Wash. We planted durum wheat, which is highly susceptible to both Fusarium species, to establish high inoculum levels in the soil. We irrigated then cut off the water to stress the plants and create more disease. This year, we planted our screening trials into stubble. After a few years of this approach we will have a "hot" nursery to evaluate the disease in the field.

Another approach is to look beyond our narrow Pacific Northwest and U.S. genetic material to find resistance/tolerance to this disease. CIMMYT has recently developed a new population of synthetics. CIMMYT is an international center that develops germplasm for breeding programs around the world. We have collaborated for many years with CIMMYT-Turkey, which

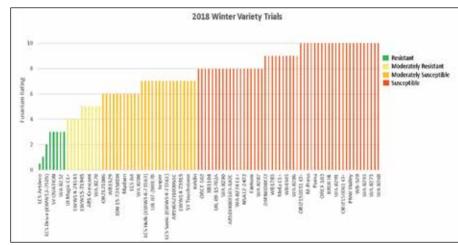


FIGURE 2. Results from rating the entries in the 2018 Washington winter wheat variety trials for entries targeted to the less-than-16-inch rainfall zone. A range of responses was observed. The most resistant lines are highlighted in green and the more susceptible are highlighted in red.

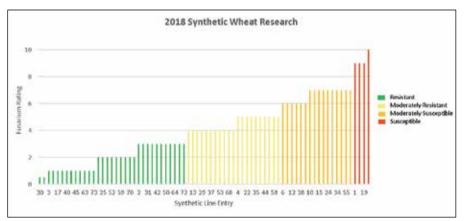


FIGURE 3. Results from rating the synthetic wheat entries obtained from CIMMYT-Turkey. Several of the numbered synthetic lines exhibited good resistance to Fusarium in the greenhouse screening trials.

works with the disease in the Middle East and North Africa.

Synthetic wheat is developed by crossing durum wheat with Aegilops tauschii, the original D genome donor of wheat. This recreates the cross that happened 10,000 years ago to create bread wheat. This population of synthetics has been screened in Turkey and found to have resistance to multiple diseases. We are presently screening these synthetics to several soilborne diseases, including Fusarium, and finding a number of tolerant/resistant lines. We have crossed the synthetics with current spring and winter wheat breeding lines from the U.S. Department of Agriculture and Washington State University breeding programs. Figure 2 and 3 compare a screening of adapted winter wheat lines to the synthetics. There are many more green (resistant) lines in the synthetic compared to the adapted lines.

Fusarium can be a difficult pathogen to work with because it is usually found in a complex with other pathogens in the field, and the symptoms of the disease are exhibited several months after the wheat is infected. Following several years of screening and working with this disease, however, we are making progress. We have good screening systems in place, we have characterized the genetic control of the disease, and we have identified new sources of resistance and begun to incorporate them into Pacific Northwest wheats.

Research collaborators: Yvonne Manning, Nikayla Strauss, and Aichatou Djibo Waziri

WHEAT WATCH

WASHINGTON GRAIN COMMISSION

Cloudy with a chance of lower prices

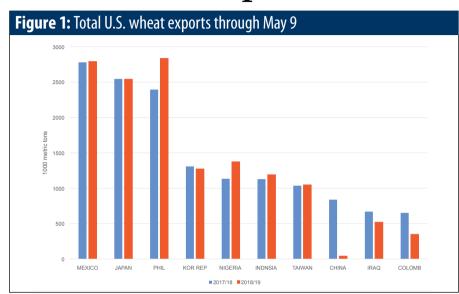


By T. Randall Fortenbery As expected, the U.S. Department of Agriculture (USDA) again

lowered their U.S. wheat export forecast for 2018/19 in the May World Agricultural Supply and Demand Estimates (WASDE). They now project total U.S. wheat exports to be 925 million bushels. This is down from the April WASDE estimate of 945 million bushels and 4 percent lower than the March forecast of 965 million.

In the April Wheat Watch article, I suggested U.S. wheat exports would likely finish the year at about 900 million bushels, slightly below the total U.S. export volume in the 2017/18 marketing year. However, the export pace did pick up in April and early May, and by May 9, wheat exports from the U.S. were running about 4 percent ahead of last year's pace, meaning that my earlier projection was probably too pessimistic. USDA may now be close to the actual export number realized for the 2018/19 marketing year.

Figure 1 shows accumulated exports through May 9 compared to the same time frame last year for our top 10 international wheat customers. In general, with the exception of China, exports to Asia have matched the previous year's pace. The one exception is South Korea, where wheat imports from the U.S. are down about 3 percent year-over-year. Also of note is the improvement in exports to Mexico compared to earlier in the market-



ing year. Mexico was our largest buyer in 2017/18. Last fall, we were running about 34 percent behind the previous year's pace for wheat shipments. By May 9, however, we were slightly ahead of last year's export pace to Mexico.

The greatest year-over-year improvement in U.S. wheat exports has been in shipments to the Philippines. Last year they were our third largest wheat buyer, but through May 9 of this year, are the No. 1 importer of U.S. wheat, exceeding Mexican shipments by more than 2 percent.

In May, USDA also provide their first balance sheet estimates for the 2019/20 marketing year (Figure 2). Based on the May supply/demand projections, USDA is forecasting an annual average market year price for wheat (across all classes and locations) of \$4.70 per bushel for 2019/20, a 50-cent-per-bushel drop from the marketing year that ended on May 31.

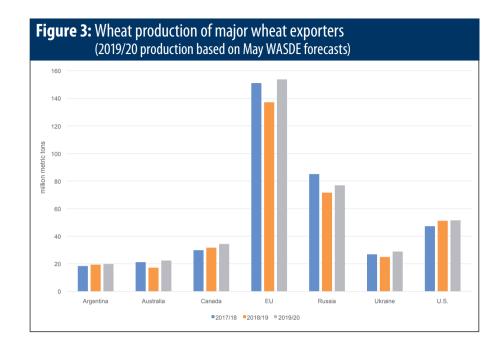
While USDA is currently forecasting a year-over-year decline in average

Figure 2: U.S. wheat balance sheet (June/May) (based on April WASDE)									
Marketing Year	USDA 12/13	USDA 13/14	USDA 14/15	USDA 15/16	USDA 16/17	USDA 17/18	USDA May Est 18/19	USDA May Fore 19/20	
Beg Stocks	743	718	590	752	976	1.181	1.099	1,127	
Imports	123	169	151	113	118	157	140	140	
Acres Planted	55.7	56.2	56.8	55	50.1	46.1	47.8	45.8	
Acres Harvested	48.9	45.3	46.4	47.3	43.8	37.6	39.6	39.0	
% Harvested	87.8%	80.6%	81.7%	86.0%	87.4%	81.6%	82.8%	85.2%	
Yield	46.3	47.1	43.7	43.6	52.7	46.4	47.6	48.6	
Production	2266	2,135	2,026	2,062	2,309	1,741	1,884	1,897	
Total Supply	3,131	3,021	2,768	2,927	3,402	3,079	3,123	3,164	
Food	945	951	958	957	949	964	960	965	
Seed	73	77	79	67	61	63	62	68	
Feed and Residual	384	228	114	149	160	51	50	90	
Exports	1,012	1,176	864	778	1,051	901	925	900	
Total Demand	2,414	2,432	2,015	1,951	2,222	1,980	1,997	2,023	
Ending Stocks	718	590	752	976	1,181	1,099	1,127	1,141	
Stocks To Use	29.74%	24.26%	37.32%	50.03%	53.15%	55.51%	56.43%	56.40%	
Avg. Farm Price	\$7.77	\$6.87	\$5.99	\$4.89	\$3.89	\$4.72	\$5.20	\$4.70	

marketing year price, futures traders appear more optimistic for prices next spring compared to now. As of late May 2019, futures prices for soft red winter wheat delivered in May 2020 were running about 40 cents per bushel higher than prices for delivery in July 2019. Based on the current market carry (prices for later delivery higher than prices for current delivery), futures traders seem to believe we are at or near a marketing year low going into the start of the 2019/20 marketing year.

The projected USDA price drop comes from several sources. Despite lower total wheat acres for 2019 compared to 2018 (based on the March 31 Planting Intentions Report), a return-to-trend yields results in an increase in wheat production this summer compared to the 2018/19 marketing year. At this stage, USDA's yield forecast is based on the historical trend and does not take into account any actual field surveys nor any potential impact from delayed plantings of spring wheat. As such, the production estimate may be subject to significant revision going forward as more is learned about the actual number of spring wheat acres planted and the overall condition of the winter wheat crop.

More problematic is the expected decline in U.S. wheat exports for 2019/20. USDA currently projects total wheat exports for 2019/20 to be 900 million bushels, a decline of 3 percent year-over-year. If realized, this will be the smallest wheat export total since 2015/16 and the third year in a row with exports well under 1 billion bushels. Even more concerning, however, is that USDA has over-estimated wheat exports early in the marketing year in four out of the last five marketing years. If that trend continues, then even 900 million bushels in U.S. wheat exports may be overly optimistic, meaning the \$4.70 per



bushel price may also prove optimistic.

Based on USDA's current projections, the U.S. is not the only country that will experience a year-over-year increase in wheat production in 2019. USDA currently expects every major wheat exporter to produce more wheat in 2019/20 compared to 2018/19 (Figure 3), with total world production increasing 6 percent this coming year. Total world consumption of wheat is also expected to increase, but by only 3 percent.

The largest percentage increase in wheat production is expected to occur in Australia, with a projected increase of 30 percent year-over-year. The Ukraine is expected to experience a 16 percent year-over-year production increase, with Canada coming in up 8.5 percent and Russia at over 7 percent. The smallest percentage increase is projected for the U.S.

The largest volume increase is expected in the EU, collectively the world's largest wheat producer, followed by China (which is also projected to increase wheat production this year). The EU's 2019/20 production is expected to increase almost 17 million metric tons, an increase of 12 percent. This represents about 36 percent of the total increase projected globally.

After experiencing a global decline in wheat ending stocks in 2018/19 for the first time in several marketing years, the world is expected to return to an environment where more wheat is produced than consumed in 2019/20, thus returning to a trend of increased ending stocks at the end of the marketing year compared to the previous year.

World trade of wheat is expected to increase in 2019/20 compared to 2018/19, but with reduced U.S. exports, our world market share will decline in 2019/20. This contributes to the bearish price outlook for the coming year. Without some sort of production issue experienced by a major wheat export competitor, it will be difficult for domestic wheat prices to improve significantly in the coming months.

Randy Fortenbery holds the Thomas B. Mick Endowed Chair in Grain Economics at Washington State University. He received his Ph.D. in Agricultural Economics from the University of Illinois-Urbana/Champaign.



Hoof power

In a throwback to older times, 51 head of horses and mules took to an 18-acre field outside of Davenport, Wash., last month to demonstrate the true meaning of "horsepower." The teams came from across Eastern Washington and Northern Idaho to plow and harrow the field in a demonstration of how it was done before tractors took over.









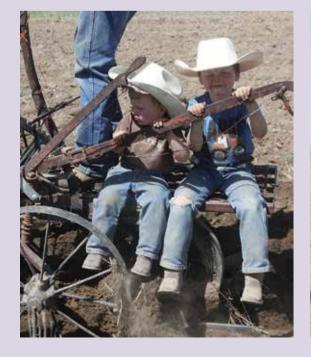
















FSA offers 'TIP' for landowners looking for tenants

By Trista Crossley

Landlords who are looking to transition Conservation Reserve Program (CRP) land back into production should check out the Farm Service Agency's (FSA) Transition Incentives Program, or TIP, as a possible solution.

Under the TIP program, landowners will receive two extra CRP rental payments if they sell or lease the land to a beginning farmer or rancher or to a farmer or rancher

who is considered part of a socially disadvantaged group. In the past, the landowner had to be retired or on the verge of retiring before taking advantage of TIP, but that provision was dropped in the 2018 Farm Bill. The farm bill also increased the amount of money available to the TIP program to \$50 million, up from \$25 million in the previous farm bill. Rod Hamilton, FSA farm program chief for Washington state, said the Evergreen state is one

of the top states for TIP participation.

As of October 2018, Washington was second only to Minnesota in the amount of TIP payments that had been paid to landowners. Minnesota totaled \$3,912,543 while Washington had \$3,906,316. In the amount of TIP acreage, Washington was third with 31,961 acres, behind Minnesota with 36,706 acres and Montana with 50,092.

There are some restrictions to keep in mind when considering the TIP program. First and foremost, direct family members who are beginning farmers are not eligible for the program if they are the landowner's children or grand-children. Nieces and nephews, however, are.

If the landowner is renting the land, FSA asks both parties to make at least a five-year commitment, and the agency will want to see that spelled out in the lease.

The land has to be in the last year of its CRP contract, and it must be transitioned into production, either cropping or grazing. Hamilton said that while small portions of the land could be re-enrolled into continuous CRP, the

majority won't be eligible for general CRP while under a TIP contract.

The farmer who is taking over production of the land also has some things to consider. While the landowner receives financial compensation from FSA, the farmer doesn't.

"It's kind of an awkward aspect of the program because usually operating capital is the big limit when trying

to break into farming,"
Hamilton explained.
"That's why we encourage the landowners who are getting TIP payments give the beginning farmer a break on the lease for those years. We don't control that, and we don't make them tell us one way or another (if they are doing that)."

In addition, the farmer will need to have a conservation plan from the Natural Resources Conservation Service

(NRCS) that provides for sustainable cropping or grazing of the land during the lease or after the sale of the land. What sustainable cropping or grazing means isn't well defined and is highly situational. Hamilton said NRCS generally will work with the new producer to protect the land and crops while still accounting for their financial situation. Sometimes those plans might include an agreement to protect the most sensitive acreage on the farm.

"We've tried to find some middle ground in there so we're not putting too big of problem on the farmer," he added. "It all depends on the piece of ground and the wherewithal of the beginning farmer to implement things."

Landowners who inherited CRP land can also take advantage of TIP as long as they assumed the CRP contract before it expired. For landowners who inherited land that is under a TIP contract, they can also assume the TIP contract once the estate is settled.

While FSA has no official means of connecting landowners and beginning farmers who are interested in



TIP, Hamilton said interested landowners and beginning farmers can give their contact information and permission to share that information to their county FSA offices. If an inquiry from an interested party comes in, the county offices will try to connect the two.

Because the program is controlled by the 2018 Farm Bill and Congress and U.S. Department of Agriculture are still working on implementing that legislation, details on when TIP funding will be available and when FSA can start taking applications is unclear. Landowners interested in taking advantage of TIP should contact their local FSA office. More information on TIP can be found on FSA's website at fsa.usda.gov/programs-and-services/conservation-programs/transition-incentives/index.

Your ad could be here

Getting read by thousands of Pacific Northwest farmers and growers. What are you waiting for?

Call Kevin Gaffney at (509) 235-2715



Our Xtreme Diesel fuel is treated with additives from Power Service Products-the manufacturer of the most technologically advanced diesel fuel additives available on the market. No one knows more about the effective treatment of diesel fuel for optimum performance than Power Service. Their sole focus is on diesel fuel and their additives are specifically formulated for treating diesel fuel. CO-Energy is proud to have partnered with Power Service to bring our customers the peace of mind that comes with knowing the fuel you are purchasing from CO-Energy is of the highest quality and will keep your equipment running strong.





509-659-1532 509-535-1534 Sunnyside 509-837-5274 509-453-3920 509-234-3311 Connell Moses Lake 509-770-0769 Pasco 509-547-3326 888-806-7676 509-476-3610

OFFICES: Genesee 208-285-1141 Colfax 509-397-4381 Rosalia 509-523-3511 **Oakesdale** 509-285-4311 **Fairfield** 509-283-2124

 Grain Marketing & Storage Pulse & Specialty Crop Processing Quality Pulse & Cereal Seeds Rail & River Shipping Terminals **Country Hedging Futures & Options**



BOTTOM LINE

The most important job between now, retirement?

By Todd King, CPA Leffel Otis and Warwick, P.S.

Most people involved in agriculture recognize that the population of farmers is aging; the U.S. Department of Labor states the average age of a farmer and rancher is 58. A significant portion of this population will be looking to transition their operation over to the next generation within the next few years. The topic of "transition planning" is something that attorneys, accountants and other professionals have aggressively addressed with clients. These same professionals tend to jump right into conversations about avoiding estate tax, minimizing income taxes and how to be fair to all the children in the family. While the technical aspects of legal and tax issues certainly need to be addressed, often times it is the simple, yet most important issues that tend to get overlooked. Below are three important recommendations for farmers looking to retire in the next few years.

Identify a successor

The best succession plan is only as good as the person chosen to be the successor. As farm owners, the first place we look for this person is our son or daughter. Does your child have the skill set it takes to fill this role? Today's farms are growing in size and sophistication. Not everyone is equipped with the tools necessary to successfully carry the operation forward. Given an adequate mentoring, the individual chosen needs to have what it takes to manage the operation in the future.

Should the individual be expected to complete a minimum level of college education or trade school before being considered for the position? Many studies suggest that there is a great benefit to a job off the farm for a few years before returning home. Is this something that should be considered in developing the farm's next manager? The bar is being raised with each generation, and the future operator needs to be trained at a level that will allow them to be competitive in the future.

Whether we are talking about a college education or employment off

the farm, the key is for the individual to achieve success in whatever path they choose before they return home. Returning home to take over the farm should be a choice, not a last resort because nothing else worked out. Do you want the person that flunked out of college or was fired from their job to be the future of your family farm? We want the individual who has been successful in their education and/or employment and has proven they are willing to work hard for success.

Another criterion would be a "passion for farming." Is this something they really love to do, or is it just another job? If you truly love what you are doing at work, it's no longer work, but rather fun. This enjoyment will help carry them through the years of weak crops and low commodity prices.

Develop a mentoring plan

Once we have identified a successor, we next need to develop a mentoring plan to properly prepare them for the new role. Farming operations are usually the first tasks passed on to the younger generation (this is usually because dad is tired of doing them). These operations include tasks like tillage, fertilizer and chemical plans, equipment maintenance, etc. The farm management tasks, however, are not often included in the mentoring plan to the extent they should be. Cash flow/banking, ag programs, crop insurance, tax planning and record keeping are all tasks that fall into the management category. Understanding

and participating in these tasks are just as important as planting wheat and making summer fallow. It is easy to put off this phase of the mentoring "until tomorrow," but the future farm management team needs to start learning today.

Does your current operation fit the new successor?

I often observe large, sophisticated farming operations that have been built up and ran run over the years by dad and mom. When I look to the next generation, it appears that the son or daughter does not have the interest or ability to handle the conglomeration that their parents have created. Putting

Sponsored by the Agricultural Marketing & Management Organization.

For more information and a schedule of classes visit wawg.org/ammo-workshops/

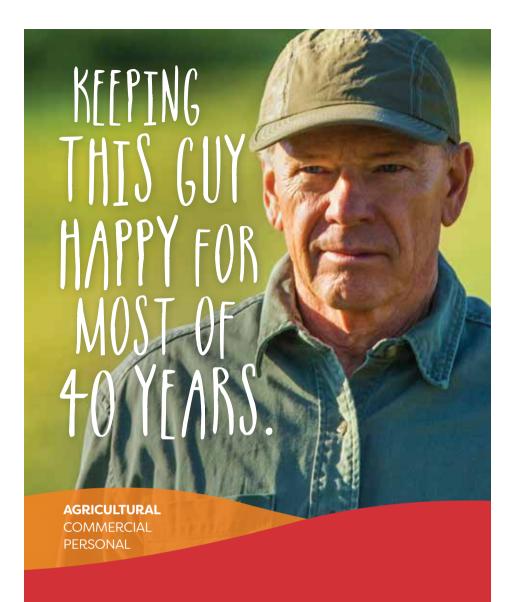


the child in this situation could end badly. This does not make the child unsuitable to run the farm, it simply points out that they are different than their parents and may want to do things differently. Take, for example, an operation that has a wheat farming component along with a cow/calf operation. What if the child has no interest in the cattle operation or vice versa? Does it make sense to force them into something that they have no desire to do? Can the operation be altered to fit the interest and abilities of the successor? I often ask my client, "Does your child have the ability and interest to handle your operation?" If the answer is anywhere close to no, then it's time to consider how we can modify the operation to make it a better fit for the successor. Proactively making the necessary adjustments together will increase the chances of a successful transition.

A successful transition plan is much more than estate and tax planning. It begins with identifying and grooming a proper successor(s) to take over the farm and then making changes, if necessary, to ensure their long-term success. Without these considerations, even the best made estate plan will likely not end well.

Todd King, CPA, is the president of Leffel, Otis & Warwick, P.S., and works out of the firm's Odessa office. He can be reached at (509) 982-2922 or by email at tking@leffelotiswarwick.com. Todd has advised clients on business and tax issues since coming to the firm in 1984. For more information, please visit leffelotiswarwick.com.

Keep informed on the Washington wheat industry and WAWG's advocacy efforts at wawg.org



At Wheatland Bank we've got our share of tough customers. Folks who wake up their own roosters more often than not while they carve out a living from seed, soil and whatever nature throws their way. They're not inclined to skip town every time something shiny comes along. And they need a bank that thinks the same way. A local bank that keeps the money close. And can still do paperwork on a tractor fender.



EQUAL HOUSING LENDER | Member FDIC

wheatland.bank

QUOTEWORTHY

"Our calculations initially probably range between \$15 and \$20 billion...We will look at the history of what happened with that program (last year's Market Facilitation Program), and we'll try to learn from it and improve from it and address some of those stakeholder comments."



—Ag Secretary Sonny Perdue on the potential aid package for farmers who have been hit with the latest round of China's retaliatory tariffs. (politico.com)



"I'm going to stop it somehow or another. If I have to sue you, I will. By opening a continuous sign-up before the general sign-up, USDA is essentially incentivizing farmers to just go ahead and enroll smaller chunks of land."

—House Ag Chairman Collin Peterson (D-Minn.) to USDA's Farm Service Agency's Richard Fordyce

over continuous sign-ups for the Conservation Reserve Program during a House Ag Committee hearing. Peterson has said he favors general CRP sign-ups because enrolling larger tracts versus smaller ones has more benefits in terms of wildlife habitat. (agweb.com)

"Leaders in Congress made it clear that the USMCA agreement would never be approved unless the tariffs on Mexican and Canadian steel and aluminum were removed. We want to remind members of Congress that the farmers in their states and districts expect support for this agreement. We are certain USMCA will bring jobs and economic prosperity to rural America and across the United States."

—National Association of Wheat Growers President Ben Scholz on news that Section 232 tariffs on steel and aluminum imports from Mexico and Canada will be removed.

"If we don't get it done this year, it won't get done until after the next presidential election."

—Senate Finance Chairman Charles Grassley (R-lowa) on a potential vote by Congress on the USMCA. (agriculture.com)

"The American Farm Bureau Federation supports your efforts to improve trading opportunities for all U.S. industries, including agriculture, and we remain hopeful that the U.S.-China negotiations will come to a successful conclusion soon. We ask that your trade negotiators make a deal as soon as possible to end the tariffs that are slashing our exports, destroying a once-promising market for agriculture, worsening the farm economy and contributing to high levels of stress and uncertainty for many farm and ranch families and other Americans whose jobs are connected to agricultural production."

—Zippy Duvall, president of the American Farm Bureau, in a letter to the president urging him to make a deal with China as soon as possible.



These dollars will be used to support candidates that understand what is critical to our industry and the livelihood of our members

Political advocacy is something many of us think we can never get involved in; the Washington Wheat PAC is out to change that.

The Washington Wheat PAC is a nonpartisan political action committee that is dedicated to supporting ag-friendly candidates.

The Washington Wheat PAC pledges to promote and support elected officials from all parts of the state that positively influence agriculture.

Why Support the Washington Wheat PAC?

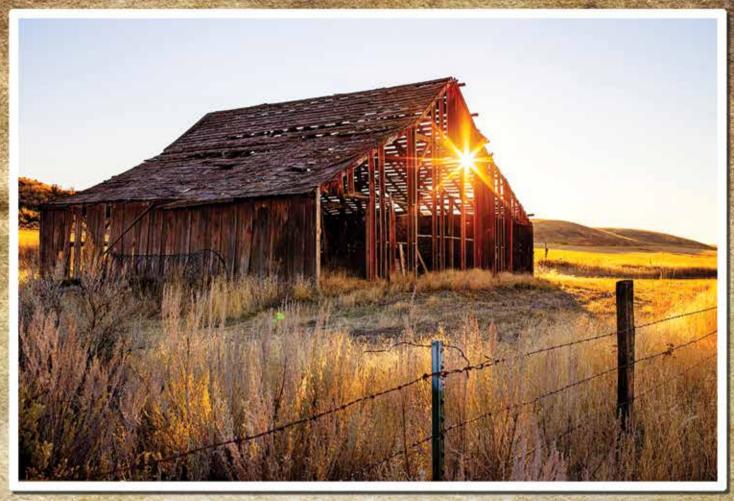
Washington farmers are losing ground politically! The ability to protect our interests is slowly dwindling. Washington wheat producers need elected officials who know and understand the industry. Without these relationships our ability to remain competitive is at risk. During the legislative session, thousands of bills are introduced; many not favorable to farming. Now is the time for the industry to join together and proactively influence legislation that directly impacts the Washington wheat producer.

Please join our efforts by financially supporting the Washington Wheat PAC. Your contribution will strengthen the network of elected officials who understand the wheat industry's goals and objectives by fighting for what is critical to the livelihood of our members.

Protect your interests by supporting farm-friendly candidates who can make a difference in Olympia.

DONATION PROMISE Yes, I would like to join with the Washington Wheat PAC's vision and support their actions with my donation.
Name:
Address:
Phone:
Email:
Donation amount:

When you make a donation to the Washington Wheat PAC, you are investing in the future of agriculture in Washington State.



Timm Farms barn in Harrington. Photo by Stacey Timm Rasmussen



The camouflage of a praying mantis is a perfect match for mature wheat at Krupke Farms near Edwall. Photo by Fred Jung

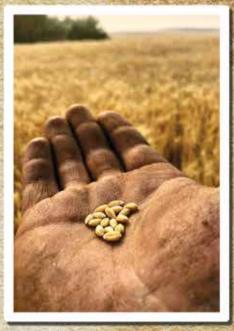


HighLine Grain South Station—previously Almira Farmers Warehouse—south of Almira. Photo by RoxAnn Sherwood.

Your wheat life...



Chris Eckhart harvests soft white winter wheat on Wild Rose Prairie in Deer Park. Photo by Sally Eckhart.



Wheat harvest south of Waterville. Photo by Max Polson.

Send us photos of your wheat life!

Email pictures to editor@wawg.org.
Please include location of picture, names of all people appearing in the picture and ages of all children.



Three generations of farmers, Carter, Cliff and Kyle Steveson, overlook a load of wheat in northern Pouglas county. Photo by Alison Viebrock Steveson.

HAPPENINGS

All dates and times are subject to change. Please verify event before heading out.

JUNE 2019

or variety.wsu.edu

variety.wsu.edu

- **1 ROSALIA BATTLE DAYS.** Community festival, parade, car show, vendors market, fun run, live music, kids activities, beer garden and more. Rosalia, Wash. *facebook.com/RosaliaBattleDays/*
- **1 REARDAN MULE DAYS.** Three on three basketball tournament, craft fair, poker ride, car show, parade. Reardan, Wash. *reardanmuledays.net*
- **1-2 MULE MANIA.** Join us for a two-day mule and donkey competition. Chuck wagon cook-off, entertainment, parade. Dayton, Wash. http://mulemaniadayton.com
- **4 WSU VARIETY TESTING CROP TOUR.** Horse Heaven, Wash., at 8 a.m. For information call Aaron Esser at (509) 659-3210
- **5 WSU VARIETY TESTING CROP TOUR.** Ritzville, Wash., at 1 p.m. For information call Aaron Esser at (509) 659-3210 or *variety.wsu.edu*
- **6 WHEAT COLLEGE.** Event will offer interactive presentations, providing information on the latest agronomic and economic research in the PNW. Sponsored by AMMO. Columbia County Fairgrounds in Dayton, Wash., 9 a.m. to 4 p.m. You don't need to be a WAWG member to attend. RSVP to 509-659-0610.
- **6 WSU VARIETY TESTING CROP TOUR.** Western Whitman County-LaCrosse, Wash., at 8:30 a.m. For more information call Steve Van Vleet at (509) 397-6290 or
- **6 WSU VARIETY TESTING CROP TOUR.** Connell, Wash., at 5 p.m. For information call Aaron Esser at (509) 659-3210 or *variety.wsu.edu*
- **7-9 DEMOLITION DERBY.** Combine demolition derby, parade, barbecue. Lind, Wash. *lindwa.com*
- **7-9 PROSPECTORS' DAYS.** Pan for gold! Three on three basketball tournament, 10k run, logging and mining competitions. Republic, Wash. *prospectorsdays.com*
- **8 FLAG DAY CELEBRATION.** Parade, vendors. Fairfield, Wash. *fairfieldflagday.com*
- **8 SNAKE RIVER FAMILY FESTIVAL.** Free food, kids' activities, live music. Boyer Park & Marina, Colfax, Wash. facebook.com/snakeriverfamilyfestival/

- **8-9 JUNIOR LIVESTOCK SHOW.** Area youth show off their prized animals at the fairgrounds. Waitsburg, Wash. *cityofwaitsburg.com/events-calendar*
- **11 WAWG BOARD MEETING.** Meeting starts at 10 a.m. at Washington Wheat Foundation Building, Ritzville, Wash. (509) 659-0610, wawg.org
- **11 PENDLETON STATION FIELD DAY.** Event begins at 7:30 a.m. at Pendleton Station on Tubbs Ranch Road outside

Station on Tubbs Ranch Road outside Pendleton, Ore. For information call Stewart Wuest at (541) 278-4381 or cbarc.aes.oregonstate.edu/

- **12 MORO FIELD DAY.** Event begins at 7:30 a.m. at Sherman Station on Lone Rock Road outside Moro, Ore. For information call Stewart Wuest at (541) 278-4381 or cbarc.aes.oregonstate.edu
- **13 LIND FIELD DAY.** Event begins at 8:30 a.m. at the WSU Dryland Research Center in Lind, Wash. For more information call Bill Schillinger at (509) 235-1933 or *smallgrains.wsu.edu*
- **13 WSU VARIETY TESTING CROP TOUR.** Harrington, Wash., at 4 p.m. For information call Aaron Esser at (509) 659-3210 or *variety.wsu.edu*
- **14 WSU VARIETY TESTING CROP TOUR.** St. Andrews, Wash., at 5 p.m. For information call Dale Whaley at (509) 745-8531 or *variety.wsu.edu*

14-16 UNION GAP OLD TOWN DAYS.

Trading post, blacksmith, train rides, games and wagon tours. Fullbright Park in Union Gap, Wash. centralwaagmuseum. org/old-town-days-union-gap.asp

- **14-16 ALL WHEELS WEEKEND.** Car show, golf tournament, fireworks, music. Dayton, Wash. *allwheelsweekend.com/*
- **14-16 WENATCHEE RIVER BLUEGRASS FESTIVAL.** Chelan County Expo Center (fairgrounds) in Cashmere, Wash. *cashmerecoffeehouse.com/wrbfest.htm*
- **15 SLIPPERY GULCH DAYS.** Chamber breakfast, tractor show, parade, fishing, fireworks. Tekoa, Wash. *slipperygulch.com*
- **15 SPRINT BOAT RACING.** Enjoy 5 grass terraces, two beer gardens and a great atmosphere. St John, Wash. 10 a.m. to 5:30 p.m. or until racing done. *webbsslough.com* or (509)648-8900.
- **18** WSU VARIETY TESTING CROP TOUR. Irrigated plot at Moses Lake, Wash., at 8

a.m. For information call Andy McGuire at (509) 754-2011 or variety.wsu.edu

- **19 WSU WEED SCIENCE.** Pullman, Wash., at 1 p.m. For info, Drew Lyon at (509) 335-2961 or *variety.wsu.edu*
- **19 WSU VARIETY TESTING CROP TOUR.** St. John, Wash., at 10 a.m. For information call Steve Van Vleet at (509) 397-6290 or *variety.wsu.edu*
- **19 WSU VARIETY TESTING CROP TOUR.** Lamont, Wash., at 1:30 p.m. For more information, please call Steve Van Vleet at (509) 397-6290 or *variety.wsu.edu*
- **20 WSU VARIETY TESTING CROP TOUR.** Bickleton, Wash., at 11 a.m. For information call Hannah Brause at (509) 773-5817 or *variety.wsu.edu*
- **21 WSU VARIETY TESTING CROP TOUR.** Mayview, Wash., at 9 a.m. For information call Mark Heitstuman at (509) 243-2009 or *variety.wsu.edu*
- **21 WSU VARIETY TESTING CROP TOUR.** Anatone, Wash., at 3:30 p.m. For information call Mark Heitstuman at (509) 243-2009 or *variety.wsu.edu*
- **24 WSU VARIETY TESTING CROP TOUR.** Eureka, Wash., at 3 p.m. For information call Aaron Esser at (509) 659-3210 or *variety.wsu.edu*
- **25 WSU VARIETY TESTING CROP TOUR.** Cereals at Walla Walla, Wash., at 1 p.m. For info call Aaron Esser at (509) 659-3210 or *varietu.wsu.edu*
- **26 WILKE FARM FIELD DAY.** Davenport, Wash., at 8 a.m. For more information call Aaron Esser at (509) 659-3210 or wilkefarm.cahnrs.wsu.edu
- **26 WSU VARIETY TESTING CROP TOUR.** Reardan, Wash., at 2 p.m. For information call Aaron Esser at (509) 659-3210 or *variety.wsu.edu*
- **27 UOFI/LIMAGRAIN VARIETY TESTING CROP TOUR.** Lewiston, Idaho, at 8:30 am. For information call Doug Finkelnburg at (208) 799-3096
- **27 WSU VARIETY TESTING CROP TOUR.** Dayton, Wash., at 8 a.m. For information call Paul Carter at (509) 382-4741 or *variety.wsu.edu*
- **27 WSU VARIETY TESTING CROP TOUR.** Almira, Wash., at 3 p.m. For information call Aaron Esser at (509) 659-3210 or *variety.wsu.edu*

28 WSU VARIETY TESTING CROP

TOUR. Fairfield, Wash., at 8 a.m. For information call Aaron Esser at (509) 659-3210 or variety.wsu.edu

JULY 2019

4 GRAND OLD FOURTH. Pancake breakfast, parade, fireworks. Pasco, Wash. pasco-wa.gov/index.aspx?nid=844

4 4TH OF JULY CELEBRATION.

Games, food and fireworks. Sunnyside Park in Pullman, Wash. pullmanchamber.com/events/chamber-events/

4-7 NORTH IDAHO DRAFT HORSE AND MULE SHOW. Kootenai County Fairgrounds in Coeur d'Alene, Idaho. idahodrafthorseshow.com

9 WSU VARIETY TESTING CROP

TOUR. Farmington, Wash., at 8 a.m. For information call Steve Van Vleet at (509) 397-6290 or variety.wsu.edu

9 WSU VARIETY TESTING CROP

TOUR. Palouse, Wash., at 3:30 p.m. For information call Steve Van Vleet at (509) 397-6290 or variety.wsu.edu

12-13 WATERVILLE DAYS. Spaghetti feed, live music, parade, car show, food & crafts, quilt show, horseshoe tournament. Pioneer Park, Waterville, Wash. historicwatervillewa.org

12-14 CHENEY RODEO. Dances Friday and Saturday nights after rodeo. Saturday parade. Cheney, Wash. cheneyrodeo.com

12-14 CHATAQUA DAYS. Food, arts and crafts, carnival, beer garden, entertainment. Chewelah City Park in Chewelah, Wash. chewelahchatagua.com

19-21 PIONEER DAYS. Parade, live music, BBQ, beer garden. Davenport, Wash. davenportpioneerdays.org

27 PALOUSE MUSIC FESTIVAL. Local vendors, food, activities available. 11 a.m. to 8 p.m. at Hayton-Greene Park, Palouse, Wash. Adult tickets are \$10, kids 6-16 are \$5 and kids under 6 free. facebook.com/PalouseMusicFestival/

Submissions

Email listings and info to editor@wawg.org. Include date, time and location of event, plus contact info and description.



It's simple, really. How well you retire depends on how well you plan today. Whether retirement is down the road or just around the corner, if you're working toward your goals now, you'll have a better chance of achieving them later.

Preparing for retirement means taking a long-term perspective. At Edward Jones, we spend time getting to know your retirement goals so we can help you reach them.

To learn more about why Edward Jones makes sense for you, call or visit today.



Jov Behen Financial Advisor 6115 Burden Blvd. Ste A Pasco, WA 99301 509-542-1626 877-542-1626



Jay Mlazgar AAMS° Financial Advisor 609 S. Washington Ste. 203 Moscow, ID 83843 208-882-1234



Greg Bloom Financial Advisor Professional Mall I I 1260 SE Bishop Blvd. Ste C Pullman, WA 99163 509-332-1564



Hank Worden Financial Advisor 109 S. Second Ave Walla Walla, WA 99362 509-529-9900 800-964-3558



Terry A. Sliger Financial Advisor 1329 Aaron Drive Richland, WA 99352 509-943-2920 888-943-2920



Chris Grover AAMS Financial Advisor 1835 First Street 509-235-4920 866-235-4920



Brian E. Bailey AAMS Financial Advisor 303 Bridge Street Ste 3 509-758-8731 866-758-9595



Rvan Brault CFP Financial Advisor 3616 W. Court St. Ste. Pasco, WA 99301 509-545-8121 888-545-8126



Stewart A Craig AAMS Financial Advisor 304 Grant Rd. Suite 4 East Wenatchee, WA 98802 509-884-1335 800-441-1534

Edward Jones MAKING SENSE OF INVESTING

Member SIPC

Advertiser Index

AGPRO 13
Bank of Eastern Washington 19
Blue Mountain Farm & Ranch 27
Butch Booker Auction 13
Byrnes Oil Co 13
Central Life Sciences
Class 8 Trucks 19
CO Energy 49
Coldwell Banker Tomlinson 9
Country Financial
Diesel & Machine
Edward Jones 57
Farm & Home Supply 21

Great Plains Equipment	11
J & M Fabrication	15
Jess Auto	13
Kincaid Real Estate	13
Landmark Native Seed	21
North Central	
Washington Fence	13
North Pine Ag Supply	. 9
Perkins & Zlatich PS	
Pioneer West	27
PNW Farmers Cooperative	49
Pomeroy Grain Growers Inc	15
Rock Steel Structures	

Rubisco Seeds	59
Second Harvest	25
Spectrum	
Crop Development 15,	19
T & S Sales	25
Tankmax Inc	17
The McGregor Co	60
Vantage-PNW	17
Walter Implement	33
Wheatland Bank	51
WestBred	. 7





RUBISCO SEEDS Hybrid Canola

WINTER CANOLA HYBRIDS:

MERCEDES | POPULAR | PHOENIX CL | PLURAX CL

CONTACT 270.903.4994 :: info@rubiscoseeds.com Agronomy Support Available, Brian Caldbeck 270.316.4316 www.rubiscoseeds.com



- ✓ All Rubisco Seeds' hybrids are adapted to wide row production systems and are bred for direct harvesting.
- ✓ Eligible for Non GM premiums
- ✓ All seed is certified Blackleg free
- ✓ Large seed sizes available
- ✓ Organic growers, please inquire
- ✓ Seed available through your preferred Retailer

PNWVT	2017	2018	
Control Varieties	lbs. per acre (rank		
Athena	3,805 (14)	4,084 (10)	
Dwarf Essex Rapeseed	3,678 (20)	3,413 (28)	
Ericka	3,716 <i>(18)</i>	2,865 (30)	
Rubisco Seeds' Hybrids	;		
Edimax CL	4,362 (3)	4,413 <i>(5)</i>	
Mercedes	4,427(1)	4,933 (1)	
Plurax CL	4,397 (2)	4,708 (2)	
Popular		4,706 (3)	
Phoenix CL		4,636 (4)	
PNWVT Mean	3,910	3,956	
LSD (p=0.05)	285	326	
C.V. (%)	15.0	14.7	

MERCEDES:

Number 1 winter canola hybrid for Yield and oil in PNW research and commercial settings over several growing seasons and multiple locations. Vigorous fall establishment-Responds to lower seeding rates relative to OP canola. Medium maturity.

POPULAR:

Bringing a new level of cold tolerance to Rubisco Seeds' winter canola portfolio. Excellent Yield potential & very high Oil Content. Medium maturity.

* PHOENIX CL:

New Two Gene Clearfield hybrid with Proven Performance in the PNW. Superior cold tolerance to Edimax CL. Vigorous Fall Growth helps overcome insect feeding. Early maturity, Enhanced Pod Shattering Resistance, Very High Yield Potential.

* PLURAX CL:

New Two Gene **Clearfield** hybrid for 2019. Early Maturity, High Cold Tolerance, Vigorous Fall Growth Above & Below Ground, Prostrate Fall Crown Development, Excellent Yield & Oil Content.





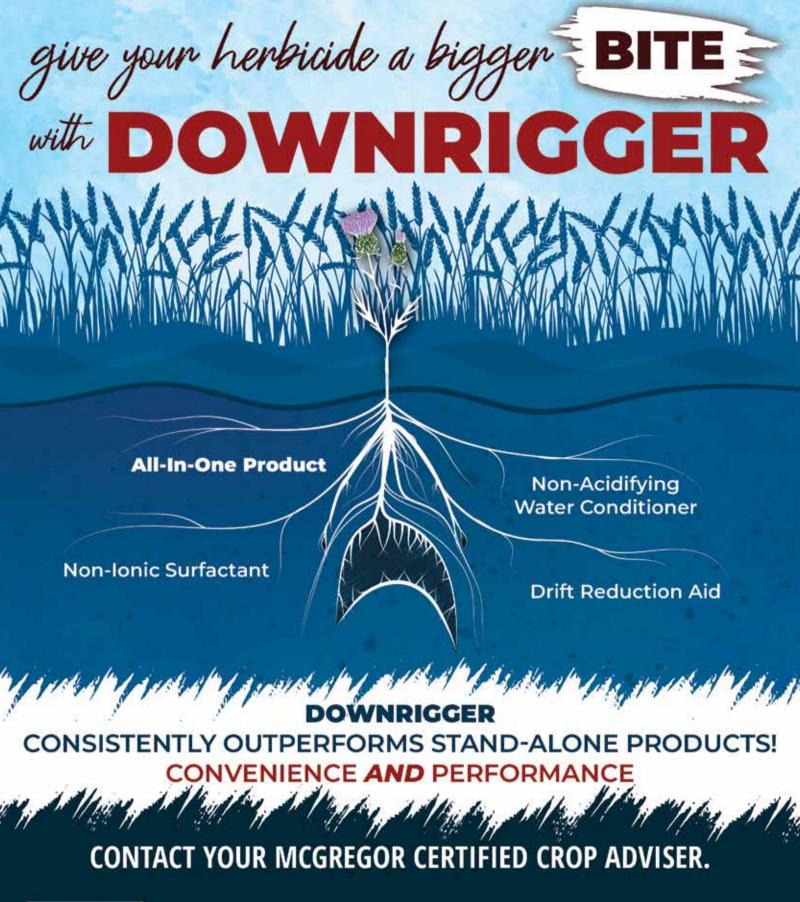
EARLY ORDER DISCOUNTS AVAILABLE, DEADLINE JUNE 7th 2019

SU or SURT Canola cultivars are not viable in a Clearfield Wheat rotation. (50% yield reduction in soils containing IMI residues, independent research Caldbeck Consulting).

* Phoenix CL & Plurax CL are both ideal for re-cropping following Clearfield Wheat. Strong cross tolerance to Imi/ SU herbicides. Can be sprayed post emergence with Beyond herbicide.



SCAN QR CODE TO VISIT WWW.RUBISCOSEEDS.COM





@THEMCGREGORCO
 @MCGREGORCO