ORECON VIELAS An Official Publication of the Oregon Wheat Industry

IN THIS ISSUE

- 4 Market Volatility and Exports
- **16** Selecting for Quality
- **18** Local Growers Take Priorities to DC

Address Service Requested

086600 WHEAT GROWERS LEAGUE 115 SE 8th St., Pendleton, OR 97801

OREGØN WHEAT









Collin Crocker President Wade Bingaman Vice President

Erin Heideman Secretary/Treasurer Ben Maney Immediate Past Pres.

County Presidents

Deacon Heideman, Gilliam County Rodney Cheyne, Klamath County Kevin Corn, Malheur County Erin Heideman, Morrow County Thad Eakin, Sherman County Emery Gentry, Umatilla County Wade Bingaman, Union/Baker County Kurt Melville, Wallowa County Josh Duling, Wasco County Thomas Bernards, North Willamette Valley Mike Schrock, South Willamette Valley

Staff

Amanda Hoey, Chief Executive Officer Cassandra Franklin, Administrative Assistant & Membership Coordinator Jason Flowers, Program Director



Growers

David Brewer, The Dalles Darren Padget, Grass Valley Jerry Marguth, Junction City

Public Member

David Prybylowski, Bend

Handlers

Rob Rye, Export Handler, Pacificor, LLC, Portland Jason Middleton, United Grain Corp., Pendleton

Staff

Amanda Hoey, Chief Executive Officer Tana Simpson, Associate Administrator Corey Shrader, Program and Office Coordinator



IN THIS ISSUE

- 3 My Two Cents Worth
- 4 Yi-I Huang Joins U.S. Wheat Associates; Taiwan Country Director Boyuan Chen to Retire
- 4 Wheat Quality in U.S. Supports Exports Despite Volatile Market
- **6** Oregon Wheat Supports American Agriculture in Addressing World Hunger
- **10** That's a Wrap for 2023 Harvest
- 12 What is Normal?
- **13** NAWG Hires New Government Relations Representative
- **13** North Asia Marketing Conference: Wheat Buyers Continue To Rely On U.S. Farmers
- 14 OWC Chair Column
- **15** Quality Legacy Set to Continue with Dr. Sean Finnie
- **16** Selecting for Quality 2023 The Times They are a Changin'...
- **18** Local Growers Take Wheat Priorities to the Halls of D.C
- **18** Advocates United Behind 2023 Farm Bill
- 20 Tackling Seasonal Issues: Fusarium Head Blight
- **21** National Science Foundation Grants Funding to Advance Oregon Microbiome Research
- **22** Extended Columbia Snake River System Closure in Early 2024
- 23 Recipe: Oregon Apple Walnut Cake

ON THE COVER: Photo by Angi Bingaman

SUBSCRIPTIONS

For address changes, extra copies, or subscriptions:

Oregon Wheat Growers League 541-276-7330 admin@owgl.org

SALES & ADVERTISING RATES

If you are interested in advertising for this publication, please contact our sales representative.

Leah Anderson - Ad Sales • NDP 406-475-1856 • landerson@ndpub.com

Oregon Wheat is published bimonthly by Oregon Wheat Growers League, 115 SE 8th Street, Pendleton, Oregon 97801. Oregon Wheat is sent to all Oregon wheat producers through funding provided by the Oregon Wheat Commission. **Receipt of Oregon Wheat magazine does not indicate membership in the Oregon Wheat Growers League.**

Every effort is made to ensure accuracy in articles published by Oregon Wheat; however, the publishers assume no responsibility for losses sustained, allegedly resulting from following recommendations in this magazine. Consult your local authorities.

The Oregon Wheat Growers League has not tested any of the products advertised in this publication, nor has it verified any of the statements made in any of the advertisements. The League does not warrant, expressly or implicitly, the fitness of any product advertised or the suitability of any advice or statements contained herein.



Dana Tuckness Chair TJ Hansell Vice Chair



Advocating for Grower Interests: From Salem to DC

Collin Crocker

President

As the summer passes by and I look into fall, I appreciate the completion of harvest and preparation for planting. It was a tough year. Prices for wheat dropped, but not as much as we had previously experienced in the rise of input costs. For a lot of the state, our yields were challenged with heat and lack of any precipitation leading up to harvest.

As we put the 2023 crop in the rearview mirror and prepare for next year, it is important to take some time to get off the farm. Getting away for a short weekend after harvest- even though it can be hard to get awayhelps to reset and get priorities in line. It is helpful to reenergize at the coast, mountains, or any place off the farm. Finding a place in nature, especially if it is away from cell service, is a rare occasion. Taking that time has to be a priority even when the list of things to deal with is very long. Like my dad always said: "Your problems will still be here when you get back." Sometimes a break to get perspective on those problems, though, is the key to figuring out how to manage them best.

We are never short on issues on the farm. Sometimes those are our own making- which is most frustrating. Often, though they are imposed from changes in legislation or regulation, which is why the League is so important.

There are a lot of ways in which the League is advocating for wheat grower interests. Recently, we joined with the Oregonians for Food and Shelter in highlighting the issues with the Environmental Protection Agency's proposed Vulnerable Species Pilot Project for Endangered Species. This draft plan outlines the Agency's proposed approach to ensuring protections for what they consider the most vulnerable species listed under the Endangered Species Act (ESA).

One of the species in the most vulnerable listing is the Taylor's checkerspot butterfly. It has two areas of habitat identified by EPA in Oregon. The habitat areas are both in the Willamette Valley. These areas were proposed by EPA as full avoidance areas where no outdoor pesticides would be allowed. The League outlined the significant impact to wheat producers and issued concerns with the magnitude of the proposal, including:

- Inability to control invasive species.
- Impact to wheat production for seed, conservation and commercial uses.



• Incompatibility of complete pesticide restrictions with ongoing agricultural operations.

With limited review time, we expressed significant concern with the lack of clarity, removal of local decision making, and insufficient staff/ technical assistance. The inconsistent regulatory approach and significant shift away from a science-based and risk based approach was of even greater concern in looking at the precedence it would set.

While EPA intends the draft plan to be in place while they work to complete the broader ESA consultations on a product-by-product basis, this work will likely span decades. During that time, it puts not only us as farmers at risk, but also puts the species at risk without tools available to maintain habitat and protect crops. Part of the role of the League and our partners, including the National Association of Wheat Growers, is to be a voice to issue concerns and talk about impacts before proposals become approved plans. We will continue to be advocating for maintaining risk-based approaches and ensure the most scientifically sound, and up-to-date data is used in decision making.

The League and our national association are tirelessly advocating for our interests: from crop protection tools, to the Farm Bill, to pursuing disaster assistance. Yet that advocacy on behalf of our growers cannot be done without growers. Advocacy is not sitting back and letting others do the job: it is actively participating. It involves bringing people out to the farm and talking about the sustainable farming practices we use. Each grower needs to tell their story.

One of the breakout sessions at the upcoming Tri-State Grain Convention is focused just to that effort: helping us to effectively talk about our farms and the impacts of policy decisions. I am really excited for all of the resources we will be bringing to growers at convention.

Thank you, as always, for your investment to the Oregon Wheat Growers League. I look forward to seeing you at the Tri-State Grain convention in November!

all Cro

Yi-I Huang Joins U.S. Wheat Associates; Taiwan Country Director Boyuan Chen to Retire

U.S. Wheat Associates (USW) has hired Mr. Yi-I Huang as Country Director for Taiwan, succeeding Boyuan Chen who plans to retire in September 2023.

"Working with Boyuan Chen the past seven years, we have come to rely on his steady disposition and solid leadership," said Jeff Coey, USW Regional Vice President. "He has been a



good ambassador for U.S. wheat and the farmers we represent in Taiwan. His retirement comes sooner than we expected, but we wish him health and happiness.

"At the same time, we are excited to welcome Yi-I Huang to our team in the important Taiwanese market," Coey added.

Huang comes to USW after a fourteen-year career in grain merchandizing at Mitsui & Company, at both the company's

Taipei and Tokyo offices. Mitsui is the parent company of Vancouver Washington's United Grain Corporation, which is a major grain supplier to several Asian markets.

In addition to his professional experience, Huang is fluent in Mandarin, Taiwanese, Japanese, and English. He holds bachelor's and master's degrees in agriculture from National Taiwan University in Taipei, and he participated in an international exchange program at Keio University of Tokyo, Japan.

USW has maintained an office in Taipei for more than 50 years, with strong demand for U.S. hard red spring, soft white, and hard red winter wheat from Taiwan's milling and baking industries. Taiwan has imported an average of more than 1.2 million metric tons of U.S. wheat per year the past five years. U.S. wheat sales to Taiwan in the first two months of marketing year 2023/24 have already reached 452,000 metric tons.

Wheat Quality in U.S. Supports Exports Despite Volatile Market

Jessica Chambers, the Rushlight Agency

Challenging market conditions continue to impact wheat exports around the globe. In the August World Agricultural Supply and Demand Estimates report from the U.S. Department of Agriculture, overall global consumption is down along with decreased trade, leaving projected global ending stocks to have dropped to their lowest levels since 2015-2016. Meanwhile, the U.S. outlook is seeing decreased supplies and reduced exports, leaving projected ending stocks raised, but still well below the 5-year average. However, the 2023-24 season average farm price looks to remain unchanged.

One of the major factors for the market instability is the ongoing conflict between Russia and Ukraine. As Russia is the number one exporter of wheat, and the lowest price supplier, prices spiked last summer with the onset of the conflict. While prices have been trending downward since December 2022, the market remains very volatile with the continued risk and damage to infrastructure impacting the price, global supply and demand. Markets are not expected to fully normalize until the conflict is resolved. Drought has been another factor contributing to market instability. Weather has been particularly dry in the Pacific Northwest, much like the 2007-08 season, which has left diminished production and rising prices as stocks lower. This is the third consecutive year of drought that has impacted one of the three growing regions in the U.S. While an El Niño event is expected to bring more rain to the U.S. next year, the cumulative effect of the droughts will delay full recovery of the market.

As the global wheat market remains volatile, it's the reputation of high-quality wheat produced in the U.S. and the Pacific Northwest that is helping support the industry. U.S. Wheat Associates Vice President of Communications, Steve Mercer, said that it is the quality of wheat that differentiates the U.S. market. With ongoing outreach from U.S. Wheat to customers, long-term relationships have been built with many countries who rely on soft white wheat from the Pacific Northwest.

"The biggest thing is that these stable customers are still purchasing U.S. wheat because they understand the value," said Tyllor Ledford, Market Analyst with U.S. Wheat Associates.

OCTOBER 2023

She highlighted Japan, one of the largest customers over the last 20 years, as an example. "U.S. wheat is just so built into their supply chain. Their customers expect products to be a certain quality, and they can't replicate that without U.S. wheat," said Ledford. Additional mature markets such as Korea and Taiwan continue to remain very stable customers for Pacific Northwest wheat, despite a slight drop in consumption.

The work U.S. Wheat does for customer support and market expansion becomes more relevant in difficult seasons like these, especially as global trends impact local farmers and producers. Tougher markets mean that producers have to be more in tune with markets than ever before. They also need a good marketing plan to capitalize on opportunities as they arise.

Despite current market challenges, U.S. wheat exports are still seeing success. Mature markets remain steady, while new markets are expanding in Latin America, the Middle East, and Africa. Mercer also emphasizes that it's important to view current trends within context, looking at the amount of export relative to production.

"Generally, we see about half of U.S. wheat produced is exported," he stated. "And that continues to track at about 50% of production, no matter the volume of production." For Oregon, the export figure is higher with roughly 85-90% exported annually.

U.S. Wheat efforts in building relationships with international customers remains a priority. With travel restrictions from COVID-19 no longer in effect, there has been a shift back to in-person activities, including a record number of trade teams visiting the U.S. As overseas customers visit local farms, meet with farmers and learn more about the U.S. system, these relationships have proven to be key in establishing new markets, as well as strengthen mature markets.

"We're still communicating with customers, still promoting that U.S. wheat is still the best value because of its quality," said Ledford. "We are really prioritizing those relationships because they are more important now than ever."



New name. Same commitment to your success.

Northwest Farm Credit Services is now AgWest Farm Credit.

Providing agricultural financial services, backed by a century of experience—to help you grow your legacy.

Contact your local branch or visit AgWestFC.com to learn more.



This institution is an equal opportunity provider and employer

Oregon Wheat Supports American Agriculture in Addressing World Hunger

Devon Lyon, the Rushlight Agency

Oregon's wheat industry, together with other U.S. wheat growers and milling sector partners, is deeply committed to combating global hunger. On August 15, 2023, this dedication was emphasized as Oregon Wheat CEO Amanda Hoey joined with U.S. Wheat Associates, Pacific Northwest farmers, port workers, millers, mariners, and state and federal policymakers during the Food for Peace Celebration at the Port of Longview.

Marking the highlight of the event, a shipment of wheat containing 28,000 metric tons of U.S. soft white wheat sourced from Oregon, Washington, and Idaho was loaded onto the ship, Liberty Glory. It is destined for the Arabian Peninsula, to help alleviate one of the worst hunger crises in the world. This vital shipment of wheat will help feed over a million people for a year. As recently underscored by data from the World Bank, the importance of these shipments becomes ever clearer, because one in five people across that region are severely food insecure, including eight million children.

The wheat industry has been staunch advocates of U.S. international food aid for seven decades. Over that time, these programs have enjoyed bipartisan support because they are simple and effective. Annually since 2020, these efforts have ensured that over one million metric tons of wheat, supplemented by millions in monetary aid, reached vulnerable populations around the world.

However, the mission to combat hunger doesn't come without challenges. As Congress reassesses the 2023 Farm



Soft white wheat is loaded for shipment (Photo Credit - American Maritime Congress)



PNW Wheat leaders at the loading of the Liberty Glory ship in Longview, WA (Photo Credit - American Maritime Congress)

Bill, a consortium of organizations, including Oregon Wheat, U.S. Wheat Associates and the National Association of Wheat Growers, sent a united message to policymakers, emphasizing the essential nature of U.S. humanitarian initiatives, like the Food for Peace program, and supporting the American Farmers Feed the World Act. This legislation would "put the food back into food aid" by restoring Food for Peace to its roots as an in-kind commodity donation program and require that at least half of all Food for Peace funds be used to purchase American commodities and ship them overseas, minimize administrative costs, and restore accountability and transparency. Their united goal remains clear: to harness the abundance of American agriculture to help combat global hunger while upholding the standards of transparency, efficiency, and accountability.

Jane Shey, Senior Policy Consultant, World Food Program USA, reinforced the importance, stating "Food security is national security. We must increase our collective efforts to access the funding and commodities needed to meet the challenge of a food-insecure world. Committed leadership on the part of the United States, from Capitol Hill to the docks where we stand today, is essential to securing a peaceful and prosperous future." Oregon wheat growers are proud to support these collective efforts, to not only provide vital nutrition to those in need but also fortify the spirit of global collaboration and compassion.

SIX CLASSES OF WHEAT

American farmers grow hundreds of wheat varieties annually, but all trace back to six primary classes. These classes differ in color, hardness, and growing season. With the diverse attributes of each class and variety, U.S.-grown wheat can produce almost any product. Discover more about each main wheat class below.

Hard Red Winter A

Versatile, with excellent milling and baking characteristics for wheat foods like hearth breads, hard rolls, croissants and flat breads. Hard Red Winter is also an ideal wheat choice for some types of Asian noodles, general purpose flour and as an improver for blending.

Hard Red Spring A

The aristocrat of wheat when it comes to "designer" wheat foods like hearth breads, rolls, croissants, bagels and pizza crust. Hard Red Spring is also a valued improver in flour blends.

O Soft Red Winter

Soft Red Winter is a profitable choice for producing a wide range of confectionary products, and for blending baguettes and other bread products.



Low moisture wheat with excellent milling results, Soft White provides a whiter and brighter product for Asian-style noodles and is ideal for exquisite cakes, pastries and other confectionery products. It offers blending opportunities with other wheat classes as well.

Hard White **Q**

Hard White receives enthusiastic reviews when used for Asian-style noodles, whole wheat, or high extraction applications, pan breads or flat breads.

Durum 🖗

Hardest of all wheats, Durum has a rich amber color and high gluten content. Hard amber Durum sets the "gold standard" for premium pasta products, couscous and some Mediterranean breads.



Photo Copyright U.S. Wheat Associates

rushlightagency.com



TRI-STATE GRAIN GROWERS CONVENTION

IDAHO • OREGON • WASHINGTON

November 14-16, 2023 Coeur d'Alene Resort, Coeur d'Alene, Idaho

Early bird registration opens Aug. 15 at wawg.org/convention and ends Oct. 15, 2023

AMBASSADOR KIP TOM served as the U.S. Ambassador to United Nations Agencies for Food and Agriculture and the chief of the U.S. Mission to the UN Agencies in Rome from 2019 to 2021. He is the Managing Member of Toms Farm in Indiana. Ambassador Tom will be discussing trade issues and status of the 2023 Farm Bill.





ROB SHARKEY is better known as the SharkFarmer, he is a risk taker and out of the box thinker who believes everyone has a story to tell. His authentic interview style and ability to tackle controversial issues has catapulted him on to Sirius XM, PBS, Acres TV and six seasons of SharkFarmer TV.

DR. DAVID KOHL is an academic Hall of Famer in the College of Ag at Virginia Tech. Dr. Kohl has keen insight into the agriculture industry gained through extensive travel, research, and involvement in ag businesses. Dr. Kohl's wisdom and engagement with all levels of the industry provide a unique perspective into future trends.





ERIC SNODGRASS is a Science Fellow and the Principal Atmospheric Scientist for Nutrien Ag Solutions, where he develops predictive, analytical software to help agricultural producers manage weather risk. His frequent weather updates focus on how high-impact weather events influence global agriculture productivity.

Breakout sessions to include:

- Wheat market Update • Farm Bill Report
- Managing Stress
- Financial Planning
- Legislative issues
- Barley Trends

For hotel reservations call 800-688-5253

Press #2 then #1 for group reservations or book online at wawg.org

The Coeur d' Alene Resort is a world class resort and hotel. Located on beautiful Lake Coeur d'Alene, the Resort offers top-of-the-line accommodations and amenities.

Auction and Dinner

Auction and dinner is Thursday, Nov.16, at 6 p.m. Social hour starts at 5:30. Donation forms can be found at wawg.



Watch wawg.org/convention for updates



November 14-16, 2023 The Coeur d'Alene Resort Coeur d'Alene, ID

Farm or Business Name						
NameSpouse						
Address						
City	State	Zip	Phone	e Number		
Email	2	State Affiliat	ion (circle)	WAWG	OWGL	IGPA
FULL REGISTRATION (includes	meals) #ATTENDING		AMOUNT			
Regular Registration	x\$225=		\$			
Spouse Registration After 10/25/2023	x\$225 = x\$270 =		\$ \$			
Non-Member	x\$350=		\$			
*Note: FULL Convention Registration	n includes Wedne	esday & Thurs	day meeting	is and all mea	als.	
SINGLE DAY REGISTRATION				Circleo	ne:	
Single Day	x\$160 =			ednesday/Thurs		
Non-Member Single Day	x\$215=		\$W	ednesday/Thurs	sday	
DINNER & AUCTION - Heads & T	ails **Auction	n Fundraiser	**			
	x \$ 10 per	person =	\$			
ADDITIONAL Meal Tickets *Avai Individual Breakfast Individual Lunch State Banquet Dinner & Auction Please Indicate Which Meals you Agribusiness Breakfast (Wednesday) Tri-State Luncheon (Wednesday)		Iding (Import et (Wednesday)	\$ \$ \$ tant for he (ad count p	urposes): st (Thursday) day)	
ExhibitorIdaho SponsorIdaho Past PresidentOreg	mittee Chairperson o Wheat Commissio o Barley Commissio on Wheat Commiss hington Grain Comm	ner ner iloner		Attendee		
Board MemberPast	Idaho Wheat Comn Idaho Barley Comm Oregon Wheat Com	nissioner	WA Lifetin	ne Member		
Charge my AMEX/MasterCard/VISA	Enclosed	l is my check-Pay	yable to WAW	G Total Paid	\$	
Card Number		Exp	i	3 or 4 digit co	de	
Name on Card						
Signature						

That's a Wrap for 2023 Harvest

Dylan Frederick, the Rushlight Agency

As temperatures begin to cool and the summer comes to a close, harvest 2023 is finally in the books for Oregon growers. While harvest comes with a sense of relief to see culmination of a year of hard work, it also brings the feeling of frustration for those who experienced below-average yields due to hot and dry conditions.

I visited several farms this summer to connect with growers about their perspectives on harvest. Among them was Eric Orem, Morrow County wheat farmer who said, "For us, harvest in 2023 was challenging. We cut a belowaverage crop and struggled with some header issues because we were running down next to the dirt. But overall, the yields and quality on our farm has been okay. We are below average mostly." Dry conditions and scorching late spring heat were significant variables this season that generated belowaverage yields and higher soft white protein levels for many growers—an outcome that is in stark contrast with the success of last year's harvest, but not nearly at the same level as the challenges experienced by growers in 2021. Dave Losh, Oregon's State Statistician for USDA's National Agricultural Statistics Service Office said, "Unlike 2022, the wheat did not get rain in the late spring/early summer to fill the kernels. From May to August, our forecast that is based on reports from growers, showed a decline in yield."

The lower test weights and higher soft white proteins this year as compared to five-year averages were buffered by several factors, however. There is a sizable carryover from the low protein 2022 crop which exporters will be able to use for



Photo by Wade Bingaman

Photo by Kim Burnet McKinney



Photo by Eva Martin



Photo by Brad Eakin

blending to meet customer specifications. In addition, quality saw improvements week-over-week through the season as harvest progressed into areas less impacted by drought and as irrigated crops were cut. While protein scales came on early, customers should be able to receive grain with consistent functionality that retains the quality metrics that U.S. and Oregon wheat is known for. The silver lining: grain moisture is low, which adds value for customers, and there were limited disease and pest pressures.

While some growers experienced challenges associated with dry growing conditions, it was also a reminder of the importance of research partnerships. Chris Williams, Umatilla County farmer emphasized this by saying, "partnership with extension-office research allows us take on challenges, learn and try things on a larger scale." Awareness in variety selection, not just for the yield but performance on test weight and quality factors is important.

Even during challenging times, and the busy season, harvest is a point of reflection for growers to take pride in the long hours, tireless time in the fields and multigenerational involvement in producing the best possible crop for the customer.

Every year, Oregon wheat is grateful to be a part of your harvest through photos and "snapshots" of your farm. Take some time to look through some of the harvest photos we received this season!





Photo by Erin Heideman



Photo by Andrea Vannata



Photo by Jessie Fields

What is Normal?

Amanda Hoey, Oregon Wheat CEO



A recent trade team to Oregon was evaluating the crop production and quality, following completion of most of our 2023 wheat harvest. At each stop they would ask a reference point in relation to the information provided: what is normal? They were asking the question regarding crop characteristics and timing. 2023 was not a 'normal' year in the sense of averages. However

normal is difficult to define as technology changes, varieties change and production shifts. Ultimately, the team settled on the best response over dinner with growers. It was simply that one element defines normal: 'Change.'

Recently I have been reflecting on the poem by Lucille Clifton titled 'i am not done yet.' I have enjoyed this poem in part because of the simple connections to life in her verses: a Buffalo author with references to bread and yeast. Buffalo is where my husband grew up, so retains a close tie for our immediate family- including the dedication to the Buffalo Bills and Sabres. Bread and yeast are essential elements of our wheat industry and part of the joy of baking. Moreso, though, the poem speaks to me as to growth, potential, and change: both individually and collectively.

That change is reflected in the conversations held at the recent U.S. Wheat Associates Buyers and Marketing conferences held over the summer. Beginning with the South/ Southeast Asia Buyers Conference in Thailand, continuing into the Latin America Buyers Conference in Mexico, and finally the North Asia Marketing conference in Indonesia. I had the opportunity to participate in the latter two as a speaker, and change was prominent in both.

During the Latin America Buyers conference, the major discussions centered on the status of exports and the opportunity for Latin America buyers. Global influences on our marketplace from the record Russian crop and larger than expected Ukrainian grain shipments, to ongoing conflict, to drought and a shift from a La Niña to an El Niño weather system continue to create immense volatility, with no sign of lessening. But they also provide opportunities, particularly when we talked about soft white wheat export potential. At the Latin America Buyers Conference, I presented on the Pacific Northwest transportation system, which has its own segment of change. Most of the conversation was set to prepare customers for the upcoming 2024 temporary river system closure, with advisement for planning ahead on purchases.

The themes from Latin America were carried forward into the North Asia Marketing Conference in August. It included additional topics of change, such as the implications of emerging technologies in wheat breeding.

At the conference,



I presented this year's soft white wheat class update, discussing the factors that allow us to provide continuity in the functionality of flour, despite the variation in production. Particularly with the carryover from the 2022 crop, combined with grain from irrigated regions and areas of the Pacific Northwest that received more precipitation, we have the capacity to serve a wide range of market requirements. Those markets remain significant for us as detailed in the countryspecific assessments on market outlooks at the conference and the conclusion on why U.S. and Oregon Wheat remains the superior choice- for both quality and value.

As such, even within the change is the familiar on quality, value and consistency, which is comforting. Like many, I gravitate to the familiar. To my set routine and engrained habits. For example, there seems to be a continual battle in my household as to whether the garlic press belongs in the top drawer or lower drawer of the kitchen cabinet. (For the record: it belongs in the top drawer.) Despite my desire to not always see things in flux, the capacity for change and adaptation is a part of every year, even as the fundamentals hold true.

As in Lucille Clifton's declarative statement that 'I am not done yet,': we are not done learning, growing, and changing as people and as an industry. Where we are going is as possible as yeast and as imminent as bread. We live between the promise and the product: the trade team relationship building and the growth into markets. Despite a challenging year "we are not done yet" and continually adapting and finding new opportunities. For the Commission, purposeful engagement with our customers remains a top priority as we seek to sustain the long-term relationships and grow in additional markets. Thank you to the dedication of our Commissioners for participating in export market development, and to all our growers who have been supporting the incoming trade teams this year.

12

NAWG Hires New Government Relations Representative

The National Association of Wheat Growers welcomed Jack Long as the new Government Relations Representative. Long is a recent graduate from Oklahoma State University, where he received a Master's in Agribusiness. Long is originally from Cole Camp, MO, and comes from a multigenerational farming operation. His upbringing in the agriculture industry has given him a deep-rooted passion for the industry and for the individuals who are a necessary part of it. He has worked for Cornerstone Government Affairs and the Oklahoma State Senate, which provided him with a fundamental understanding of policy and current issues within the wheat industry. "We are excited to welcome Jack Long to our team as the new Government Relations Representative at NAWG," said NAWG CEO, Chandler Goule. "We look forward to seeing his positive impact as he builds strong relationships and navigates the world of government relations on behalf of NAWG." Jack will play an important role in advocating for wheat growers on the Hill.

"I'm very excited for the opportunity to get started with the National Association of Wheat Growers," said Jack Long "I have worked alongside wheat growers all throughout my career and education and look forward to being an advocate for the wheat industry."

North Asia Marketing Conference: Wheat Buyers Continue To Rely On U.S. Farmers

In an average year, buyers in Japan, South Korea and Taiwan import 20% of the U.S. wheat crop. It is an impressive statistic that speakers referenced more than a few times during the recent U.S. Wheat Associates (USW) North Asia Marketing Conference. The two-day gathering that drew wheat buyers from all three countries to Indonesia, served as an example of USW's ability to showcase U.S. wheat quality and key components of the industry's efficient and effective supply chain efficiently. Including, of course, the people who grow U.S. wheat.

Rick Nakano, Dong-Chan "Channy" Bae and Yi-I Huang – USW Country Directors from Japan, South Korea and Taiwan, respectively – each led groups of U.S. wheat customers to the conference. Conference participants also included USW staff from all three countries, USDA officials, and state wheat commission staff. The speakers selected by USW shared updates on crop production, crop quality outlooks, new technologies, financial forecasts, transportation issues and insights into the global wheat market.

Sang-Won Yong, an executive with Daehan Flour Mills in South Korea, expressed appreciation for the conference's focus on wheat quality. "We all find U.S. wheat to be a big part of the formula to do what we do, to produce quality products for our customers. We've been able to rely on U.S. wheat farmers to produce the quality wheat we need."

Oregon Wheat Commissioner David Brewer was one of two farmers participating in the event. "It didn't take long to see the bonds U.S. wheat has built in these three markets," he stated. "I've actually had some of these buyers on my farm for trade team visits. Seeing those same customers in their environment helps me understand how they make buying decisions." He summarized the take-aways from the event, noting that "our customers here really want to know what is available in the U.S. It's all about the quality we produce."





Latin American and Caribbean Buyers Conference Builds Market Opportunities

Dana Tuckness

OWC Chair

As I read the email the day before I was to depart for the Latin American and Caribbean Buyers' conference, I wondered what I had gotten myself into this time. The email read, "since it is the rainy season, combined with a monsoon which will hit this week, which may dump 1 to 6 inches of rain 'per day', we recommend you bring a very good raincoat or a strong umbrella." Living in the desert of Eastern Oregon where we average around 9 inches of moisture per year, most of which is snowfall in the winter, I can't even imagine what six inches of rain in one day would look like. Anyway, I packed the rain gear and headed to the airport.

The conference, held in Puerto Vallarta, Mexico was put on by U.S. Wheat Associates (USW) and sponsored by wheat commissions throughout the United States. Welcome and opening remarks by USW directors from both the Mexico City, Mexico and Santiago, Chile offices were followed by remarks from Oklahoma farmer and current USW chairman Michael Peters, who did an outstanding job before the crowd of roughly 100 (only four farmers). USW CEO Vince Peterson then provided an interesting statistic as he talked about wheat issues around the world: since 1900, Russia has averaged two major droughts per decade but hasn't had one since 2012. Not something you can take to the bank, but nevertheless.... He also reported the Latin America population and wheat consumption are both on positive trajectories for the next 25+ years. Mexico is currently the largest importer of U.S. wheat, although not much of that is soft white at the present time.

Reports were given on current crop conditions and estimates on the different classes of U.S. wheat, by commission CEOs from their respective regions. There were also presentations on global wheat supplies, storing wheat in tropical climates, and USDA money that is available to borrow through banks to purchase U.S. commodities including wheat. Mike Spier, USW VP of Overseas Operations, reported that it is an ideal time for buyers to purchase wheat from the U.S. as the price is relatively low, we have a good supply of quality wheat and ending stocks for several classes may be lower in

OREGON WHEAT

COMMISSION



US Wheat Market analyst, Tyllor Ledford, shares updates with Commissioner Dana Tuckness at the Latin America Buyers Conference.

the near future. Oregon Wheat Commission CEO Amanda Hoey did an excellent job reporting on transportation out of the PNW. Urging buyers to get their orders in, as part of the river system will be shut down for a period this winter for scheduled maintenance. Buyers appeared to be very pleased with the quality of information that was available at this conference.

I had an opportunity to meet and talk with several buyers. The good quality of U.S. wheat, (in particular, soft white out of the PNW, by those who use it) is almost always part of the discussion. As a grower, another topic that is almost always brought up is the question; 'How many generations is your farm?' (The 'ol sustainability issue.) One concern of some, even in Latin America, is our issue with the dams being breached. This kind of surprised me, but they realize if the dams are removed, it could cause supply

OCTOBER 2023

OREGON WHEAT

chain issues and of course make the wheat they purchase much more expensive.

One Central American user of soft white that used to buy from the PNW stated he had recently switched to buying from one of our competing countries because it was a better price. He was not at all happy with the quality of what he had recently purchased and was looking to come back to the U.S. I assured him we could supply him with what he was looking for. Over the long-haul, quality wins the race! With planting time upon us, we as growers need to be sure we plant varieties that meet the standards our customers want. A brochure is available which lists varieties from most to least desirable. Also check out Ryan Graebner's trials to see which might be most suited for your area. Both are available at www.owgl.org.

And yes, the Mexican weather service was right: it did rain. A thunderstorm poured down well over an inch in about 40 minutes. Of course, it arrived on the first evening during the opening reception, which happened to be the only outdoor event. With approximately 100 attendees squeezing under a canopy set for 40, it was pretty tight fit. It felt a little bit like at the circus when they see how many clowns can be put into a VW bug. Hats off to the USW Latin American offices for putting on an outstanding conference and helping build tight relationships with our customers!

"Enjoy life with its simple wonderful everyday magic" (Jerry Jeff Walker)



Quality Legacy Set to Continue with Dr. Sean Finnie

Tana Simpson, Associate Administrator

The Oregon Wheat Commission is pleased to welcome Dr. Sean Finnie as the new Director of the USDA-ARS Western Wheat Quality Lab in Pullman, Washington. Dr. Finnie grew up in Moscow, Idaho and received a B.S. and M.S. in Food Science from the University of Idaho. He furthered his education and completed his Ph.D. in Grain Science and Industry at Kansas State University. His training



then continued as a Postdoctoral Research Fellow at KU Leaven, in Belgium, with postdoctoral research focused on understanding the role wheat lipids play in overall quality.

Dr. Finnie was first introduced to cereal science while an undergraduate student working at the USDA-ARS Western

Wheat Quality Lab, where he washed labware and conducted solvent retention capacity and polyphenol oxidase tests. Before joining the USDA, he was the Senior Manager of Cultivar Development and Research at Bay State Milling Company within the Varietal Solutions business unit. In this role, he led cultivar development initiatives with an emphasis on nutrition and quality traits. This included commercializing the first wheat varieties with elevated Total Dietary Fiber content by increasing the levels of resistant starch in the grain.

The Oregon Wheat Commission works closely with the Lab on several projects focused on maintaining and improving Pacific Northwest grain quality, including the Genotype and Environment study, testing of OSU advanced lines, the Preferred Variety List and the PNW Wheat Quality Council.

Selecting for Quality 2023 - The Times They are a Changin'...

Dr. Andrew Ross, Professor, and Dr. Teepakorn Kongraksawech, Senior Research Associate

We eagerly await the arrival of OSU's next wheat breeder, Dr. Margaret Krause, and welcome the new director of the USDA Western Wheat and Pulse Quality Lab (WWQL), Dr. Sean Finnie. Dr. Krause is scheduled to commence at OSU in November 2023. Her arrival will almost certainly ring in changes for our core Oregon Wheat Commission (OWC)-funded business of supporting the wheat breeding program with functionality testing. We currently have a well-functioning system in place to ensure new variety candidates achieve the functionality targets for their market class. Accordingly, in the short term, we will provide the same type and level of service to the new breeder as we were providing to Dr. Zemetra. In the longer term we will work with Dr. Krause to identify potential operational changes that will align with her vision for wheat variety development at OSU.

But even with the potential for

operational changes, the fundamentals still apply. For soft white (SW) wheat the fundamentals are these: the grain should be white seeded, high in test weight, of appropriate protein content (affected mostly by environment and crop management), physically soft, have low polyphenol oxidase activity (related to noodle sheet darkening), and crucially have a large release of flour sized particles after the first break of the milling process (we call this break flour yield). The derived flour should have low water absorption and have a low inclination to absorb other baking fluids like sucrose syrups (cookies and cakes), and dilute acid (sponge-and-dough saltine crackers) and dilute alkaline solutions (e.g., dissolved baking soda). The flour should also make standard test cookies of large diameter and good symmetry and make sponge cakes of high volume with silky, fine textured interiors.

Our collaboration with the WWQL continues. The variety development manager, Dr. Alecia Kiszonas consistently works with us to maximize the value and timeliness of the data we get from the WWQL. The new research director, Dr. Sean Finnie, has a strong connection with the PNW. Dr. Finnie did his master's work through the University of Idaho

16



Dr. Andrew Ross



Dr. Teepakorn Kongraksawech

Researchers' Names and Titles:

Dr. Andrew Ross, Professor, and Dr. Teepakorn Kongraksawech, Senior Research Associate

2023 Commission Funding Levels: \$80,000

Abstract:

Sales of Oregon wheats and other cereals largely rely on the grain having functional qualities that meet or exceed customer expectations. Accordingly, identifying genotypes with class-appropriate, superior, or specialized functionality is a necessary task when developing new cereal cultivars. The Oregon State University (OSU) cereal quality program provides functionality testing to support OSU cereal variety development. Our core business is testing soft white winter wheat. We also test hard red, hard white, club wheats, and barley. We provide, as needed, on-site support for any other OSU efforts aimed at improving cereal grain guality. Testing is based on laboratory assessments of grain characteristics, flour milling performance, multiple facets of flour functionality, dough and batter performance, and end-product traits. Most work is focused on early generation screening and reporting key data in the same calendar year as the harvest. Ideally, this happens prior to Fall plantings of the next generations of winter cereal breeding nurseries. Our contribution also includes interpretation of latergeneration functionality data created by the USDA Western Wheat Quality Laboratory. Assessments are done on breeding lines supplied by the breeding and/or agronomy programs. Samples are grown at multiple locations across the state to cover the key agroclimatic zones for grain production. Functionality assessments are synchronized in detail with the needs and objectives of the respective breeding and other programs.

specifically working on soft wheat flour quality. Dr. Finnie was advised by the scientist he replaces, Dr. Craig Morris. We look forward to new developments in our collaborations with the WWQL.

The bakery renovation is all but complete. As of this writing, the last few pieces are falling into place. The new worktables

OREGON WHEAT

have arrived and been assembled (Figure 1). The remainder of our shelving will arrive around August 18th, and the new OWCfunded full-sized oven will arrive mid-September. There are still one or two plumbing and electrical loose ends to clear up. We hope to finish moving in and organizing the space over the next month and plan an opening event during the fall.

Last year we reported some preliminary data on the OWC-funded acrylamide study. This is an update as we prepare the study for publication. As noted previously, wheat is the raw material for a variety of products that expose people to dietary acrylamide including bread, cookies, crackers, and cakes. Free asparagine (Asn) concentrations in the raw material, processing conditions and recipe ingredients combine to determine final acrylamide levels in a food. Acrylamide is of concern because it is classified as a probable human carcinogen. However, epidemiologic evidence on its carcinogenicity from dietary sources is mixed. Acrylamide is a concern for us because it is a concern for wheat processors and for consumers. As reported last year there was a strong relationship between increased protein and higher free Asn. However, because we seek (but don't always achieve) lower protein contents in SW, free Asn may be less of an issue in the SW class compared to other classes. Also reported last time, the range of free Asn in this study was 80 to 540 mg/ kg. This range was consistent with reports from the literature on wheats grown in other environments (140 to 1500 mg/kg). Location, year, and variety all had significant effects on free Asn levels. However, location had around 70x and year 18x the impact of variety on free Asn levels. The literature agrees, also showing large environmental impacts on free Asn levels in wheat grown in environments across the USA and Europe.

Importantly, the results show that seeking lower free Asn levels should not cause drag on the quality of SW wheats. Table 1 shows associations between free Asn and key functionality indicators. The table generally speaks for itself, but in summary,

	Comment
Associations with better SW quality	
Grain protein %	Very significant - lower protein/lower Asn
Test weight	Significant - higher TWT/lower Asn
Water SRC %	Significant - lower water SRC/lower Asn
Sucrose SRC %	Significant - lower sucrose SRC /lower Asn
Flour Ash %	Significant - lower flour ash / lower Asn
Hardness Index	Barely significant - softer grain/lower Asn
No association with SW quality detected	
Break flour yield %	Not significant
Lactic acid SRC %	Not significant
Sodium carbonate SRC %	Not significant

Table 1 - Summary of correlation analyses between free Asn levels selected functionality traits of eight soft white winter wheat varieties grown at three locations in Oregon USA over two years. SRC: solvent retention capacity. TWT: test weight.



Figure 1: The worktables have arrived and been assembled. In the background bakery equipment and associated small wares await the new shelves.

seeking improved SW quality (softer grain, lower flour absorptions, lower protein) through breeding and management is associated with the desired lower free Asn levels. In addition, one variety of the eight tested was significantly lower in free Asn across the two years and three locations. So, despite the low heritability seen for Asn in this study there may be leverage for selective genetic gain. Other studies vary in their estimations of the heritability of free Asn from low to moderate. The literature is quite clear on management practices that avoid elevated free Asn levels: manage for lower protein and ensure soils are not sulfur depleted.

The collaboration with the Wheat Marketing Center and U.S. Wheat Associates on identifying ways to measure flour quality factors responsible for cake making performance continues apace. In 2022-23, a comprehensive literature review was undertaken and written up by Dr. Ross. It reviewed studies that associated absorption or viscosity of

uncooked or cooked cake batters or simple analogs of cake batters (e.g., flour + water + sugar) with cake volumes. Viscometry based on flour/water/sucrose mixtures showed promise for predicting sponge cake volumes. The review also unearthed guidance on potential cooking temperature profiles needed for good prediction. Although this work is not funded by OWC, it is thoroughly entangled with our core OWC-funded activities and circles us back to the potential for operational changes after Margaret Krause arrives. Success in having an early generation screening method for sponge cake performance would change our operations and once deployed the method would allow us to, at the minimum, rapidly weed out those lines that have little probability for good or better sponge cake performance. Once again, stav tuned!

OREGON WHEAT

Local Growers Take Wheat Priorities to the Halls of D.C

Tayleranne Gillespie, the Rushlight Agency

The upcoming Farm Bill presents a pivotal opportunity to fortify the foundations of the U.S. wheat industry. Members of the Oregon Wheat Growers League and the National Association of Wheat Growers (NAWG) continue to advocate for industry priorities, urging lawmakers to prioritize these critical components of the Bill, ensuring the vitality of the agricultural sector, while honoring the dedication of those who labor to feed the world.

NAWG President and Oregon grower Brent Cheyne participated in the June Wheat DC Fly-In, meeting with portions of the Oregon delegation and leadership in the House and Senate ag committees. Subsequently in August, House Agriculture Chairman, Glenn Thompson, announced that the 2018 Farm Bill would have to be temporarily extended, as Congress would miss the September 30 deadline for passing the new package.

As legislators continue to work on crafting the Farm Bill, it is a critical time for in-person visits, so the National Association and League have accelerated visits to the Hill throughout the fall. League Secretary/Treasurer Erin Hansell-Heideman and NAWG President Cheyne both travelled to Washington DC in September for the National Wheat Fly-In to continue advocacy work. "Traveling to DC and meeting with lawmakers in person is the best method we have to ensure our message is being heard," said Erin. "Sitting down face to face, we can share our real world knowledge and experience and make sure that they really understand the needs of wheat growers in Oregon."

The team from Oregon travelling to DC will grow with the new year. Typically, members of the Executive Committee and League staff would be on the Hill for visits. Starting in January 2024, Thad Eakin will join the team for advocacy flyin trips to Washington, D.C. Thad is a 5th generation wheat farmer in Sherman County currently serving on the League Board of Directors.

This year, Thad was selected for the prestigious Bayer Leadership program. NAWG partners with Bayer Crop Science to provide an advanced leadership program for state wheat grower leaders who will soon join the NAWG Board of



House Ag Chair GT Thompson and NAWG President Brent Cheyne

Directors, or want to be more involved in industry leadership. The three-part program focuses on the responsibilities of board members, governance, media relations, and lobbying. Sessions include leadership styles and communication, policy and economic issues facing the industry, and training on how to interact with the media and lawmakers.

"I am excited to participate in this training and dive deeper into the issues facing wheat growers," said Thad. "I know how important good advocacy is for our industry, and I look forward to learning more about being a strong voice for Oregon growers."

"The League continues to have a strong team on the ground to advocate for local priorities at the state and national level," said Amanda Hoey, CEO. "I am thrilled that Thad will have the opportunity to strengthen his skills through the leadership program and join us for the Wheat Growers Mission to Washington event in January 2024."

The 2023 Farm Bill is expected to be the most expensive ever, with chapters on commodity subsidies, SNAP, ag research, rural development, crop insurance, food aid, export promotion, farm credit, forestry, and land stewardship. NAWG and state partners have continuously worked to highlight and refine key priorities for the wheat industry, which can be seen in the NAWG priority overview. The League will continue to advocate on behalf of Oregon's wheat growers throughout the development of the Farm Bill.

Advocates United Behind 2023 Farm Bill

The Oregon Wheat Growers League joined the "Farm Bill for America's Families: Sustaining Our Future" coalition, which is urging passage of the Farm Bill this year. This group is comprised of agricultural, environmental, forestry, wildlife, nutrition, and hunger advocates who seek to bring stakeholders together on the vital importance of the Farm Bill by highlighting five key aspects: food security, job creation, conservation, risk management, and addressing hunger.





NATIONAL ASSOCIATION OF WHEAT GROWERS

2023 FARM BILL PRIORITIES

Enhance the Farm Safety Net

Crop insurance is a critical public-private risk management tool for wheat growers. NAWG urges lawmakers to protect and strengthen crop insurance in the next Farm Bill, which is the cornerstone of the farm safety net.

The Title I farm safety net programs Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) help protect wheat growers from significant crop price or revenue declines. NAWG recommends a meaningful statutory reference price increase to enhance its effectiveness and overcome economic challenges.

- Protect and enhance crop insurance.
- Increase the PLC reference price.
- Improve the PLC effective reference price "escalator.

Support Voluntary Conservation

Voluntary conservation programs should be utilized for expanding the adoption and maintenance of conservation practices. They should provide a wide range of conservation options for all producers in all climates and all regions of the country.

Farm Bill Conservation programs provide wheat growers with a variety of voluntary approaches to adopt conservation practices that are appropriate for their operation.

- Support funding for financial and technical assistance through voluntary conservation cost-share programs.
- Support increased state and regional management of CRP based on local input.
- Oppose any efforts to expand conservation compliance.

Develop Market Opportunities

With half of all wheat produced in the U.S. destined for export, the Market Access Program (MAP) and Foreign Market Development (FMD) program are vital in helping grow and diversify agricultural markets. These programs have an average return on investment of \$24.50 per dollar invested, and additional resources will help boost agricultural exports.

Wheat farmers pride themselves in helping feed the world, and it is also important in-kind food aid remains the cornerstone of our international food assistance programs.

- Double funding for MAP and FMD.
- Ensure in-kind food aid is the foundation of Farm Bill food aid programs.



25 Massachusetts Avenue, NW, Suite 500B • Washington, D.C. 20001 • (202) 547-7800 • wheatworld.org

Tackling Seasonal Issues: Fusarium Head Blight

Christina H. Hagerty, Associate Professor

Each growing season brings a different set of challenges and opportunities. No two crop years are the same; this is also true for the pests and diseases we observe each year. In the Pendleton Cereal Pathology program, versatility is important. We need to be able to drop everything and tackle seasonal issue(s) that are often time sensitive. We make sure we can move quickly to address an emerging issue, in addition to the obligations of our formal trials and collaborations.

To identify a unique challenge that might need our attention, I typically abide by the rule of three. If I receive at least three stakeholder queries about the same problem, I know it is time to develop a plan to address the issue. Stakeholder calls, emails, and texts are the best part of my job. There is always an opportunity to learn from every stakeholder call, and it helps us keep our finger on the pulse of the crop year. Stakeholder interaction is key to keeping the program relevant.

Recent examples of seasonal issues have included stripe rust epidemics, albino wheat seedings, and green bridge issues. In recent years, Fusarium head blight (FHB) has been at the top of our list. The incredible rains in spring 2022 occurred when many dryland winter wheat fields were flowering. A plant infection requires three factors to occur simultaneously: a susceptible host, a virulent pathogen, and favorable environmental conditions. This is known as the disease triangle. This weather event completed the FHB disease triangle and impacted an unknown number of acres. Our wheat varieties in the PNW are susceptible to FHB, and Fusarium inoculum is ubiquitous in our soils (determined from our first OWC-funded project), and the heavy spring rains of 2022 splash dispersed the Fusarium inoculum into the flowering wheat heads. As the rains continued, it provided the necessary humidity for the infection to progress.

Increased opportunities for corn production in the Pacific Northwest can also create increased risk of FHB in the following wheat crop. The FHB problem in southern Idaho became much worse with the arrival of the Chobani Yogurt factory in Twin Falls: increased corn acreage was planted to supply the dairies with yogurt contracts.

In our region, Fusarium infection often causes early season damping off in seedlings and Fusarium crown rot (FCR) later in the season. Seed treatments can effectively control seedling blights but are not as effective in reducing FCR.

When timely rains occur at wheat flowering and/or wheat is grown under irrigation, Fusarium may be splash-dispersed into the wheat flowers to initiate FHB infection. Small grain

Researchers' Names and Titles:

Christina H. Hagerty, Associate Professor

2023 Commission Funding Levels: \$25,000



Christina Hagerty with Research Assistant, Grayson Namdar at Oregon Wheat Day at the Capitol. February 14, 2023 in Salem, OR

residue decomposes rapidly, whereas corn debris can last years, especially in our dry climate. As such, the corn debris serves as a longer-term source of FHB inoculum.

Fusarium head blight significantly reduces yield and can result in the accumulation of fungal mycotoxins in harvested grain. These toxins are very harmful for humans and animals.

The main mycotoxin of concern is deoxynivalenol also known as "DON" toxin and infamously known as "vomatoxin" (or VOM for short). It is called vomatoxin due to the induction of vomiting in humans and other monogastric animals. However, even dairy and beef producers are unwilling to use DON contaminated grain due to detrimental effects on the cattle health.

The FDA limits DON concentration in finished food products to a very low threshold of 1 part per million (ppm) for human consumption, but some PNW wheat buyers have lower thresholds. For barley malt production, detectable levels up to 0.5 PPM of DON may result in rejection of barley. In some regions, DON testing is performed frequently on grain delivered to the elevator – the testing is variable and



depends on the year and region. When early testing occurs and DON toxin is discovered in grain, then more frequent testing is conducted at elevators. Grain above the allowable threshold is rejected, and typically cannot be used as animal feed. Recent FHB infections in the PNW have not reached these thresholds. FHB continues to remain outside of market concerns, but it is still essential for growers to monitor for yield loss and the potential for developing mycotoxin issues. The more we know about FHB, the higher likelihood we have to keeping infection levels low.

If your operation has corn production as an opportunity, it is critical to consider breaking the disease cycle with a nongrass crop following corn. When possible, tillage following the corn rotation is encouraged to help bury and break down corn residue and reduce the inoculum source.

I am not an expert on FHB but I always enjoy the process of self-education on emerging issues. I thank my colleague, Dr. Juliet Marshall at University of Idaho, for serving as my sounding board. Dr. Marshall is an expert on FHB and has done tremendous work to increase our understanding of the FHB disease cycle.

If you would like to learn more about FHB diagnostics and control, I encourage you to check out our new diagnostic guide, and please reach out if you have any questions. We thank the Oregon Wheat Commission for their time and support!

National Science Foundation Grants Funding to Advance Oregon Microbiome Research

Tayleranne Gillespie, the Rushlight Agency

In 2014, Dr. Chris Mundt, a Cereal Pathologist and Professor at Oregon State University (OSU), learned of microbiome research underway in the United Kingdom concerning disease resistance in crops. Faced with a devastating disease outbreak in Oregon's wheat crops, and a lack of effective solutions for local farmers, Dr. Mundt recognized the potential for conducting similar research at OSU. The goal: provide valuable insights to disease resistance crops in the Pacific Northwest growers.

The initial experiments carried out in 2014 yielded promising outcomes, capturing the attention of the Oregon Wheat Commission and the Idaho Wheat Commission. With financial support from these Commissions, the research gained momentum, eventually culminating in the prestigious recognition of a \$2 million grant from the National Science Foundation (NSF) earlier this year.

Oregon Wheat Commission Chair Dana Tuckness noted how pleased he was to see the grant come to fruition. "Over a three-year timeframe, the Commission provided just under \$50,000 in total to support this work," he stated. "The effectiveness of leveraging this small amount of producer funds for groundbreaking research represents a huge return on investment for wheat producers in the state." Reflecting on this award, Dr. Mundt remarked, "Without earlier investments from the Oregon and Idaho wheat commissions, we never would have been eligible for this grant."

As part of the Using the Rules of Life to Address Societal Challenges program, the NSF is directing funding

CONTINUED ON PAGE 22



CONTINUED FROM PAGE 21

towards 12 projects this year. This initiative channels the knowledge derived from investigating the intricate dynamics within diverse living systems across scales, timeframes, and spaces – collectively known as the Rules of Life – to address urgent societal issues. Among the focal areas are clean water access, sustainable planetary practices, carbon sequestration, biosecurity, and combating antimicrobial resistance.

Collaborating closely with OSU Principal Investigator Dr. Posy Busby and a team of researchers, Dr. Mundt is dedicated to developing and scrutinizing crop varieties engineered to enhance agricultural sustainability. The OSU team approach centers on altering plant genetics to assemble microbial communities that bolster resistance against prevalent and emerging diseases. Additionally, the researchers are exploring the potential of microbiomes in conferring drought resistance to crops.

The scope of the grant encompasses research on various crops, including wheat, poplar, and tomatoes. This breadth aligns with the NSF's interest in comprehending how microbiomes influence a spectrum of organisms. Dr. Mundt explained, "...by studying multiple crops, hopefully, we can find general mechanisms for everyone to use."

The NSF funding will remain available for the next five years, affording OSU researchers the time to expand their investigations and, optimistically, generate substantive insights and methodologies. Ultimately, this endeavor strives to equip wheat cultivators and the broader agricultural community with effective tools to proactively manage disease and drought challenges in the years ahead.

Extended Columbia Snake River System Closure in Early 2024

Every year, the U.S. Army Corps of Engineers systematically evaluates the inland navigation infrastructure of the Columbia Snake River System and targets the highest priority projects to repair or to replace. Significant projects, like installation of new lock gates and other large components, can take years to plan and many weeks to execute in the field. Extended lock closures are sometimes necessary to complete these challenging repair and replacement projects, which help maintain the safety, efficiency and reliability of this essential waterway.

To ensure long-term operability, an extended closure is planned in 2024. The next extended closure is anticipated from January 14, 2024 to March 29, 2024 to replace major components at McNary, Lower

22



Credit Pacific Northwest Waterways Association / River Values

COLUMBIA RIVER

Monumental, Little Goose, Lower Granite, and John Day dams. Similar extended closures occurred in 2010 and 2016 and another extended outage is anticipated in 2030 to replace gates at McNary and Bonneville dams. Investment to this maintenance and the additional improvements will help the U.S. wheat export supply system remain the most reliable in the world. It is a highly coordinated effort to minimize the closure timeframe. Those on the river system are taking steps to minimize the disruption to flow of wheat and working with customers to be aware of the timeframe and prepare accordingly. U.S. Wheat Associates notes that they believe "there will be sufficient volume of all U.S. wheat classes normally available from the PNW. Buyers can also help lower the risk of interruption and minimize potential costs by taking a longer view of their supply chain needs."

OCTOBER 2023

MSL = Mean Sea Level

RECIPE Oregon Apple Walnut Cake

1986 Oregon Wheat contest winner

INGREDIENTS

- 1 cup butter or margarine
- 2 cups granulated sugar
- 2 eggs
- 1 teaspoon baking powder
- 1/2 teaspoon salt
- 2 cups sifted cake flour
- 1 cup cultured sour cream
- 1 Tablespoon vanilla

Powdered sugar

INSTRUCTIONS

- 1. Cream butter and sugar.
- 2. Add eggs, one at a time, beating well after each one.
- 3. Sift dry ingredients together. Add alternately with sour cream and vanilla mixture.
- 4. Put half of the batter in the bottom of a greased and lightly floured 10" bundt pan. Put in filling and cover with remaining batter.

FILLING:

Mix Together: 1 cup finely chopped walnuts 1 cup peeled, diced apples

- 2 Tablespoons brown sugar
- 1 Tablespoon cinnamon

- 5. Bake at 350 degrees for one hour.
- 6. Cool 5 to 10 minutes and turn out of pan. Dust lightly with powdered sugar. No filling should show on the finished cake.



WELL, THIS CHANGES EVER THIS CHANGES THEY'RE HERE. THREE PROVEN ALTERNATIVES

THEY'RE HERE. THREE PROVEN ALTERNATIVES SURE TO GIVE YOUR BOTTOM LINE A LIFT.

ANCHOR[™] 3L ST

ACTIVE: METALAXYL-M (Mefenoxam)

Trusted systemic control of seed- and soil-borne fungi.

ACE[™] 3.8L ST

ACTIVE: IPCONAZOLE

Reliable, highly versatile fungicide delivers enhanced disease protection.

LEGEND" 5L ST

ACTIVE: THIAMETHOXAM

One of the most proven and consistently effective insecticide treatments.



TREAT 'EM RIGHT. LEARN MORE AT ALBAUGHSEEDTREATMENT.COM

©2023 Albaugh, LLC. All rights reserved. Albaugh and the Albaugh logo are registered trademarks and Anchor, Ace and Legend are trademarks of Albaugh, LLC. Always read and follow label restrictions, precautions and directions for use. Some products may not be registered for sale or use in all states or counties. Please check with your local extension service to ensure registration status. Anchor EPA# 42750-390. Ace EPA# 45002-40. Legend EPA# 45002-44.

