An Official Publication of the Oregon Wheat Industry

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Ben Maney

President



We have had a spring to remember. From 70-degree weather in March to snow falling during Easter weekend, I think we can all agree our spring weather is anything but ordinary these days. Moisture this spring has been a welcome sight to my farm compared to last year's dry spring. I am ashamed to say that one of my gauges on moisture in the spring is how well the volunteer wheat in my stubble is growing, and I can say it looks great.

As we welcome the spring rains and occasional snowstorm, these early months are a juggling act among many farmers trying to spray wheat fields or get those last few acres seeded. However, eventually we all get our spring done and begin preparing for our wheat harvest in a few months. A career in agriculture is one of few required to work around the weather and our hours are not 8-5 Monday through Friday. Much to my wife's dismay, it seems our weather breaks on the weekend, and you will find me on a tractor this time a year. However, on the flip side, one of the perks of being a farmer is when the work is done, I can get away no matter what the weather is doing.

2022 has brought us many challenges on the farm here in wheat country. The price of wheat is strong, and it looks to strengthen as we get closer to harvest due to our low wheat stocks, exacerbated unfortunately by the Russia-Ukraine war. While we are seeing strong pricing this spring, one thing that always tends to follow is an increase in inputs. Roundup prices have increased by 400% since last spring; fertilizer has more than doubled, and we all can relate to the dramatic increase in fuel prices. As we welcome the higher prices for wheat; much of those sales will go towards the massive increase in input prices. Which brings me to a recent conversation that was had in March with the White House and National Association of Wheat Growers on ways to incentivize farmers to produce more wheat this fall. Well... what are your initial thoughts on this? For me, it is difficult. We seek to help ones in need. Yet, farmers have had challenges the last few years with drought, fire and low prices. The risk we take in changing our production practices is even greater, as a result, and support must be matched to that risk associated with planting more acres. Particularly in our dryland environments where much of our wheat acreage is based, asking farmers to change their crop rotation by planting into fallow ground will



Oregon Wheat celebrates NWY contest winner Steven Van Grunsven.

cause increased stress on our crop ground that typically needs a year to replenish water and nutrients for the next crop. The impacts of those changes are not just felt in the current year, but subsequent years as well. On a positive note, having the White House reach out to our national association says a lot for our organization in the positive work they are doing to promote wheat in D.C.

In March we had the opportunity to travel back to New Orleans for Commodity Classic and our annual meeting with NAWG. This is a great opportunity for OWGL, NAWG and anyone associated with agriculture to participate. If you have never been to Commodity Classic, think of the best farm trade show you have ever been to... and then supersize it. All the flagship companies attend, promoting new technology, new equipment, new chemicals, etc. While commodity classic and the trade show are exciting, participating in NAWG's annual meeting is the main reason Oregon Wheat attends. The annual meeting welcomes new incoming state representatives, NAWG's new officers transition into their 2022 roles and we thank our state representatives who have served the past two years. This year, we also celebrated a national wheat yield contest award winner from Oregon; Steven Van Grunsven. During our meetings we had the opportunity to listen to industry leaders, receive updates from federal agencies and begin preparation on the upcoming Farm Bill. Next year's Farm Bill will be very interesting for our industry. Some

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topics on the table include the increase focus on smart farming practices, carbon markets, funding to CSP/EQUIP, protecting crop insurance and increasing our PLC reference price.

Finally, I am excited that field days are back in-person. Since they have been hosted remotely the past two years, it is exciting and refreshing for our farming community to visit in-person on how our scientists are helping our farms improve for the future. Please stop by and spend some time with our scientists and if you attend the CBARC field day, make sure you get there in time for the ice cream social sponsored by the Oregon Wheat Growers League.

I hope you have had a smooth and efficient spring with some timely rains. With harvest around the corner, I wish you all a safe and bountiful harvest with combines running smooth and plenty of wheat to fill the hopper. Thank you again for your continued support to Oregon Wheat Growers League.



Study Considers Benefit, Risks of Breaching Lower Snake River Dams

Jessica Chambers, Wayfinder Communications

Wheat growers in Oregon and across the Pacific Northwest depend on the Columbia Snake River barging system to move exports to market. Millions of tons of wheat move through the Columbia Snake River system each year including more than 60% of all U.S. wheat to international markets - making it the nation's single largest wheat export gateway. Along with the additional benefits of flood control, irrigation, and hydroelectric power, dams along the Columbia and Snake Rivers are crucial to not just wheat growers, but rural communities in the region.

A study currently being conducted out of the state of Washington could potentially change all this.

In October 2021, Governor Jay Inslee and Senator Patty Murray announced in a joint statement that they would begin a federal-state process to determine if there is evidence to support breaching dams along the lower Snake River in an effort to save declining salmon populations. The study will examine the six types of benefits currently provided by the dams: navigation and transportation; agriculture and irrigation; energy; tourism and recreation; community resilience and economic health; and salmon recovery and habitat restoration.

At stake are these benefits the dams provide to those in the Pacific Northwest and nationwide. Should the dams be breached, it could have a devastating impact on wheat growers across the region. Without barging – which is the safest and most efficient way to transport wheat – transportation and storage expenses could increase

dramatically for grain suppliers and shippers, and by extension, the cost per bushel.

Along with the direct impact to wheat growers, there are indirect costs as well. With the loss of hydropower generation, the available baseload power would be reduced and would create the need for replacement power generation. It would also impact carbon emissions from additional transportation needed to move crops to market through highway and rail networks.

While the health of salmon populations is vital, the benefits of dam breaching have been called into question. Studies have shown strong correlation between climate change and warming oceans with declining salmon populations rather than from dams. There is little certainty that removing dams would have the desired effect. Meanwhile, the impact would be felt throughout the region with the river's other uses of transportation, irrigation, flood control, renewable electricity and recreation.

The study is currently being conducted and will build on previous research and include outreach across the Pacific Northwest. A draft report is expected to be released for public comment in May 2022, with the public comment period lasting from mid-May to mid-June 2022. To comment and get involved, visit https://www.lsrdoptions.org/. Governor Inslee and Senator Murray will use this study to inform their recommendation on whether the Lower Snake River Dams should be breached or retained. That recommendation is expected no later than July 31, 2022.

Return of Field Days

Amanda Hoey, CEO

Field days offer a unique opportunity to showcase research, discuss solutions to issues impacting wheat production and see first-hand the performance of new varieties in trials. While we have adjusted in the past two years to meet the pandemic restrictions, with Oregon State University and USDA teams producing videos to explain their current work, hosting virtual events and offering self-guided tours of trials, there is nothing quite like being out in the field together. This year, we welcome the return of in-person field days and crop tour events around the state.

- Hyslop Field Day: May 25
- Gilliam County Crop Tour: June 8
- Wasco County Crop Tour: June 9
- Hermiston Ag Research and Extension Center Field Day: June 13
- **Pendleton Station Field Day:** June 14 (Followed by an ice cream social hosted by OWGL)
- Sherman Station Field Day/Crop Tour: June 15
- Morrow County Crop Tour: June 16
- NW OR Cereal Variety Tour: June 23
- Eureka and Walla Walla Field Days: June 27



- Klamath Basin Winter Wheat Tour: June 29
- Klamath Basin Spring Wheat Tour: August 3

Each of the field days will include presentations on crop breeding and genetics, pest biology and management, soil science, and a chance to see wheat varieties in the trials. What else do field days offer? A chance to catch up with our neighbors and talk about the crop. Please join us for one or more field days and participate in the exchange of research results with growers. Check the OSU and/or Oregon wheat websites for locations, times and updates.

Greenman Appointed FSA Oregon State Executive Director

In April, President Biden appointed Gail Greenman as the USDA Farm Services Agency (FSA) Oregon State Executive Director. Greenman has most recently served as Executive Director for the Westside Economic Alliance, and previously served as the lead federal public affairs professional at the Oregon Farm Bureau. She also



has experience working in the federal education policy arena.

The long-awaited appointment of a State FSA director is necessary to assure services are administered effectively. "The Oregon Wheat Growers League welcomes the news of Gail Greenman's appointment and looks forward to continued work with the agency on behalf of Oregon's wheat producers,"

stated OWGL President Ben Maney. President Maney also extended sincere appreciation to Josh Hanning who has been serving in the interim State Executive Director role. "In effect, he has been doing at least two jobs and covering that role during a particularly critical time as we worked through issues on CFAP payments for wheat farmers and other FSA supports. He is a tremendous asset and has gone above and beyond in his capacity to assure FSA programs would most effectively support our producers."

FSA State Executive Directors oversee FSA operations and agricultural policy implementation in the state. Each State Executive Director works with the State Committee to administer FSA programs and County office operations, develops and maintains stakeholder relationships with customers and other agencies and governments.

2022 Legislative Session Summary and Upcoming Election

Nicole Mann and Amanda Dalton, Dalton Advocacy, Inc

The 2022 Oregon legislative session saw unprecedented turnover in the weeks leading up to the first gavel, especially at the leadership level. Prior to session, House Speaker Tina Kotek, the longest serving Speaker in Oregon history, announced that she would be resigning to focus her attention on the race for governor. So too did House Republican Leader Christine Drazan and longtime Democratic State Senator Betsy Johnson, both of whom are also running for governor. Senate President Peter Courtney, who holds the title of longest tenured leader in his chamber, also announced he would not be seeking re-election but would continue serving as Senate President through the end of 2022. The remarkable turnover in legislative leadership led to significant uncertainty over how the session would play out, especially considering the meltdown of prior short sessions. To the surprise of many, though, the two parties engaged in more meaningful cooperation than the last few years. There were still flashpoints, especially during consideration of the agricultural overtime mandate, but there were no GOP walkouts nor major delays in business. In fact, the session adjourned Friday, March 4, a full three days before the constitutionally required adjournment date.

Leadership turnover aside, the 2022 session was a step toward normalcy in terms of legislative operations. Though committee hearings were still held virtually, the Capitol itself was open to the public for the first time in nearly two years. Unfortunately, many legislators still only accepted virtual meetings which resulted in our lobbying efforts being nearly 100% remote.

Agricultural Overtime

The agricultural overtime mandate (HB 4002) quickly became one of the most political and contentious bills of the session. The Oregon Wheat Growers League (OWGL) participated in several pre-session workgroup discussions with the goal of finding consensus and crafting a fair piece of legislation that would put more money in the hands of farmworkers while allowing Oregon farmers to continue operating. Unfortunately, our desire to find a compromise was not reciprocated by the proponents.

While in the middle of negotiations, labor advocates walked away from discussions and filed a lawsuit with the Oregon Bureau of Labor & Industries, undermining the good faith talks we had been having and threatening our industry with a worst-case scenario version of mandated overtime if the Legislature failed to act. This action increased tensions,



halted negotiations, and emboldened a number of democrats to support the legislation.

OWGL worked alongside the agricultural coalition to urge the legislature to craft a proposal that gave agricultural producers the flexibility needed to successfully plant and harvest crops — a unique Oregon agriculture overtime law. Unfortunately, our request was denied and a strict agricultural overtime mandate was passed on a party-line vote.



"In total, more than 250 bills were introduced in the short session. While short sessions are limited to 35 days and intended to be for emergency issues/ budget rebalancing, several significant policy bills passed in this short session, including ag overtime."

How HB 4002 will impact individual operations depends on the number of workers employed and taxable income. The law will phase-in over the next six years – starting at 55 hours in 2023 and ending at a 40-hour work week by 2028. The bill also includes a tiered tax credit structure where farmers can apply for credits to offset their labor costs over the five-year phase in.

2022 Additional Legislation of Interest

In addition to our efforts on agricultural overtime, OWGL actively supported and opposed several pieces of legislation due to their potential impacts on members.

• SB 1534 Natural and Working Lands: OWGL took a lead role in opposition for this bill. Our concerns focused on the problematic new definitions included

around carbon sequestration on working lands that were not developed with stakeholder input and the creation of a working lands inventory, which also did not have input from stakeholders. Our request for the bill to not move forward in 2022- to allow for robust stakeholder engagement in the interim- was accepted and we have begun to form a stakeholder coalition to discuss the concept going forward. OWGL also intends to engage meaningfully with the Oregon Global Warming Commission (OGWC) to craft a framework that recognizes the critical role natural and working lands play in carbon sequestration, secures meaningful investments in research, and creates opportunities for the OGWC to partner with landowners on a voluntary basis.

- HB 4141 Phase Out of Petroleum Diesel: OWGL opposed this bill as it would have phased out petroleum diesel from the marketplace in Oregon. We joined an industry coalition and through advocacy efforts were successful in turning the bill into a Task Force that will only study the possible incentives to be offered to entities to transition away from petroleum diesel.
- HB 4097 Wildfire Firefighter Volunteer Tax Credit: OWGL supported efforts to establish a \$1,000 tax credit to eligible wildfire firefighter volunteers. The bill did not move forward, but there is momentum behind the concept, and it may be reintroduced in 2023.

Additionally, we closely monitored the Private Forest Accord and supported funding to Oregon State University Statewides. Unfortunately, OSU Statewides did not receive their requested \$2.2M to bring them up to current service level. We supported this request and are disappointed that it was not funded. Without the additional funding, we will likely see some current vacant positions, due to retirements or transitions, remain empty until funding is secure in the next biennium. The Private Forest Accord, SB 1501, passed with bipartisan support and is the result of an agreement between conservation groups and timber landowners to make a variety of updates to Oregon's Forest Practices Act.

2022 ELECTIONS

While the lead up to the 2022 legislative session saw major changes at the legislative leadership level, Oregon's political ecosystem as a whole will see massive turnover ahead of the 2023 legislative session. The 2022 governor's race will be the first time since 2002 that Oregonians will be presented with a ballot without a previously elected governor listed. 36 gubernatorial candidates will be on primary ballots in May – 17 Democrats and 19 Republicans. And we can't forget former State Senator Betsy Johnson who is pursuing the office as a non-affiliated candidate, she does not face a primary.

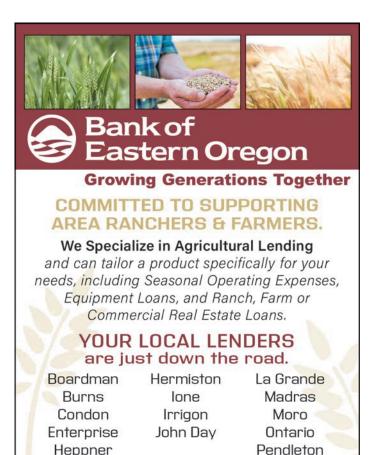
In the legislative arena, 28 House seats - nearly 50% of the entire chamber - are either open or have an appointee on the ballot for the first time in 2022. This level of turnover is far

Limited Duration Tiered Tax Credit

Year	Hours	>50 FTE	25 <x<50 fte<="" th=""><th><25 FTE</th><th>Dairy Only < 25 FTE</th></x<50>	<25 FTE	Dairy Only < 25 FTE
2023	55	30%	75%	90%	100%
2024	55	20%	60%	80%	100%
2025	48	10%	60%	80%	100%
2026	40	-	50%	60%	100%
2027	40	-	50%	60%	100%
2028	40	-	50%	60%	100%

outside the norm for either chamber and may be unprecedented in the state's history. In the Senate, seven districts are open or have an appointee running on the ballot for the first time. With so much turnover and new district boundaries in place, the opportunities for a change in the partisan makeup of each chamber as well as new faces in general will likely lead to one of the more unpredictable election cycles in recent memory.

Even with all the political activity going on, OWGL's policy efforts continue. Interim workgroups are beginning to form to discuss legislation for the 2023 session and we are engaging in proactive conversations with legislators to ensure future proposals are crafted with our input and do not come at a cost for Oregon farmers and ranchers.



MEMBER EDI

Annual Grower Workshop Returns

Dylan Frederick, Wayfinder Communications

Since this is my first article for Oregon Wheat Growers League, I thought it would be an opportune time for an introduction. My name is Dylan Frederick. I'm the Managing Director for a communications firm in Salem called Wayfinder Communications. I started working with Oregon Wheat just a few short months ago on everything from public relations to social media. As the newest addition to the Team Wheat, it has been exciting to absorb so much information in such a short amount of time about the industry, our producers, and high-quality product they are growing.

This year, the Oregon Wheat Commission (OWC) resumed its annual Grower Workshop for those interested in experiencing firsthand the shipping, grading, product development and customer relations essential to supporting wheat from the point it leaves the farm to where it reaches customers. I was excited to have the opportunity to join them for the event. Due to COVID-19 considerations which prevented hosting the workshop last year, many wheat producers also had not had the opportunity to experience this process until this year. We were pleased to have a full roster for the 2022 Grower Workshop which occurred March 1- 2 in Portland.

The day began at the Albers Mill building with an introduction to Commission operations by CEO Amanda Hoey and discussion on the investments made by the Commission using assessment funds to research, market development and grower services. She detailed the Commission's efforts to increase producer profitability, enhance yields and focus on the quality aspects of Oregon Wheat which distinguishes our product in the marketplace. Attendees were able to receive the first view of the preferred variety brochure for 2022.



Making the grade: David Prybylowski, Debbie Crocker and Collin Crocker assess wheat samples.

Following that introduction, the first item on the workshop schedule was a tour of the Wheat Marketing Center. The commission heard from Managing Director Janice Cooper, who talked about how the Center's innovative product research and development process is working to improve end product quality for international consumers. The team visited the analytical lab where technicians demonstrated the equipment

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2022 Grower Workshop participants at the Wheat Marketing Center.



Participants watch grain unloading from railcars.



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used to test grain, flour and dough quality, including seeing the falling number test in action and watching the alveograph blow dough bubbles to analyze dough strength and flexibility. The interactive visit continued with the Center's wheat innovation lab facilities which includes three major pilot scale production lines. The cracker/biscuit line is one of only two in the world and participants watched the full process of the pilot line production of crackers being tested from flour derived from Oregon wheat (and the team, of course, had to test the final product as quality assurance specialists)! Finally, the bake lab was the last stop in the visit to the Center, with an opportunity to assess and taste sponge cakes made from different classes of wheat and flour mixtures.

Before leaving the Albers Mill building, which houses the Wheat Marketing Center, Oregon Wheat Commission and U.S. Wheat Associates, we visited with one additional entity in the building: the Federal Grain Inspection Service (FGIS). A FGIS inspector walked us through the process of how grain is inspected and the different variables they look for and examine in the process of grading wheat. Participants each tried their hand at identifying the different wheat classes and separating samples for grading purposes. While some teams had greater success, the collective determination was that the skill and precision was best left to the professionals!

The next highlight of the two-day workshop schedule was a tour of the United Grain export terminal in Vancouver, WA. We watched grain being unloaded out of railcars, along with the loading of an ocean vessel with soybeans leaving the dock for Asian markets. It was interesting to get a firsthand look at a ship waiting nearby to be loaded with soft white wheat for the Philippines. For many, including myself, it was fascinating to get a better understanding of the export process and timeline it takes for wheat to get to the end-buyer. After being shipped to Portland, the grain is then unloaded into an export facility where it may sit or be transferred directly into an ocean vessel that can take a day or two to load. The ship will then arrive in



Collin Crocker captains the tugboat.



Clint and Sarah Carlson evaluate sponge cakes.

Asia within a week or two. Learning about the export process and having conversations with those involved in the export process provides invaluable perspective.

The second day of the workshop is always one of the most memorable (and in recent times, coldest!), as we were able to tour Shaver Transportation. We took a tugboat tour around the Portland area and got the opportunity to examine the engine room of the tugboat and hear about the many trips they conduct each year towing barges loaded with Oregon wheat. Captain Scott of the tugboat even gave attendees a chance to captain the ship! This was a fascinating experience, as Shaver barge lines support over 1,200 barge tows annually, with the standard grain tow consisting of four barges, totaling 14,000 tons of wheat.

After touring Shaver, the group visited the Overseas Merchandise and Inspection Company. Here we again toured state-of-the art lab facilities, with a focus on the certification and testing necessary to assure our customers that our grain exports are meeting the many standards set by our international customers. We visited about the testing to assure absence of mycotoxins, ensure residues are below minimum levels, assess food safety and a range of other analytical services.

Among the other presentations we got the chance to hear from were program overviews and updates from Tyllor Ledford with U.S Wheat Associates, Robert Zemetra with OSU Wheat Breeding/Genetics, Ryan Graebner with OSU Variety Trials, and Jordan VanZante with Pacificor, who gave us an update on grain exports and markets.

Thank you again to all of our producers who were able to make it for this two-day event. This workshop was jam-packed with information and firsthand experiences that have helped shape my understanding of the farm-to-market process for grain, and I know it was impactful to many others. We invite you to consider participation in the 2023 Grower Workshop and see how the grain produced on your farm is examined and processed before it reaches customers around the world.

OSU Appoints New Dean of Ag

Provost Feser announced the appointment of Dr. Staci Simonich as Oregon State University's new Dean of Agricultural Sciences and Director of the Oregon Agricultural Experiment Station. Dr. Simonich is a professor in environmental and molecular toxicology and chemistry and has



served in several leadership roles at OSU, including executive associate dean in the College of Agricultural Sciences, associate vice president for research operations and integrity at OSU, associate dean for academic and student affairs in the College of Science, and associate department head in environmental and molecular toxicology. She received her Ph.D. in chemistry from Indiana University in 1995 and an MBA from OSU in 2020. Prior to joining OSU, she worked in the consumer product industry with Procter & Gamble for six years.

The Commission has enjoyed a positive relationship with Oregon State University and the Dean of Ag Sciences and sees that relationship continuing to expand under the leadership of Dr. Simonich. "In a pivotal year with our wheat breeder announcing his retirement at the end of the year, we have had numerous conversations with Dr. Simonich to ensure no gap in the position. She has demonstrated the principles of leading with integrity and continues to come to the table, offering collaborative solutions to meet the needs of wheat producers for key research outcomes," stated Jerry Marguth, Chair of the Oregon Wheat Commission. He noted further that "Dr. Simonich has actively sought opportunities to interface with the Commission and seek our input on issues impacting our industry." Oregon Wheat congratulates Dr. Simonich on her appointment and looks forward to continuing to work with her.





JUNE 2022

Principles of Production

Amanda Hoey, Oregon Wheat CEO



In 2017 I had an opportunity to visit the North Atlantic Treaty Organization (NATO) headquarters in Brussels, Belgium with a small group of professionals from around the U.S who held roles in business, government, and civil society. It was NATO's now 'old headquarters.' The facility was in the final year of occupancy, which had seen 51 years of decisions that shaped the course of history and democracies. While

making decisions by consensus, the U.S has heavy influence on the organization as a member.

At NATO, the discussion was wide ranging- from the amount of U.S. contributions as an ally to the use of Article 5 following the September 11 attacks. One discussion of particular interest, though, was the assessment of the level of threat posed by Russia against western democracies and the buildup of forces in the Black Sea region. Given that much of the organization circled around issues with the Soviet Union since its founding, the aggression of Russia was, unsurprisingly, a primary focus of our visit. Plus, at that time, it was fresh off a summit in which NATO had approved additional military supports into Poland and the Baltic states and provided support for Ukraine, condemning the actions of Russia following the 2014 annexation of the Crimean Peninsula. NATO's enhanced defenses reflected concerns not only for those recent hostile actions, but also that Russia was using strategic exercises to prepare for future larger scale attacks to undermine long-term stabilities in central and eastern Europe.

I was working in economic development rather than wheat at the time of the visit. So, while logistics and input shortage implications were perspectives I could add to the discussion, the impacts of any potential further invasion on the infrastructure to move and store wheat and the actual production of a crop, although surely in the consideration from NATO's end, were not a primary topic of our discussion. The Black Sea region clearly was then, as now, a significant producer of wheat and player in the global grain market, with roughly 30 percent of the world wheat exports. Over the last few months, given the increased attention with the war in Ukraine, however, wheat has been thrust into the international spotlight, bringing a stark reminder of the importance of food security and the role of wheat.

Food security returns us to a focus on basic resources, which then brings everything back to the principles of



We require agriculture as a state and national policy priority to protect farmland and farmers. Decisions made in our legislature needs to refocus a lens on how those decisions will impact the farmer, and the ability to produce.

production. With ongoing uncertainty, particularly regarding logistics in the Black Sea region, efforts to increase the supply of wheat have led to calls for an increase in domestic production. For Oregon, our capacity is limited to our productive farmland and largely dictated by the weather. Our value, beyond the quality wheat we produce, is in keeping the steady, reliable production that supports both domestic food needs and our customers around the world. Decisions made in the current year have ripple effects to subsequent year production capabilities. So, we must look broadly to protect the ability for long-term sustainable wheat production while increasing available stocks in the near term. That requires providing support for wheat producers in managing the escalating risks with rising input costs, addressing logistics challenges in getting fertilizer and inputs to Oregon wheat farmers (that includes state agency issues we have recently encountered) and continuing actions designed to bring down the cost of crop inputs--particularly fuel and fertilizer. Finally, we must focus attention to providing increased resources to aid food insecure areas. While pain is shared all around, wealthy nations can buffer from the worst impacts of inflation overall, but nations with fewer resources suffer. As the disruption in supply is compounded by inflation in the procurement of wheat, resources must be substantial to avoid further catastrophe.

Overall, it requires **agriculture as a state and national policy priority to protect farmland and farmers.** Decisions made in our legislature needs to refocus a lens on how those decisions will impact the farmer, and the ability to produce.

This was not the article I initially intended to write for the June magazine. As I worked on other topics related to the activities of Oregon Wheat, however, I kept circling back to the issue pressing on all of us in the global wheat situation. As such, I wish to provide a thank you to all our Oregon wheat farmers for the reliable wheat production that is often taken for granted, and the security that it provides us for us in meeting the most basic of needs: food security.



OREGON WHEAT



Parting Thoughts

Jerry Marguth

OWC Chair

OREGON WHEAT COMMISSION

Some have suggested that I probably shouldn't attempt to write anything longer than my name, and if you wish to add your name to the list, my contact info is available. Moving past that, I have just a couple of things to post this month.

Over the last few Commission meetings, we have had some discussion about where we stand on our fiscal responsibility and funding. As you may have already figured out, since the Commission funds track crop production yields, assessment revenue has been a little bit short over the last couple of cycles. Dependent on where we are in a long-term weather cycle, it may continue to be short for a while to come. The Commission maintains a reasonable reserve to backfill short years and maintain reasonably level research funding, as well as meet our funding commitments to industry partners such as U.S. Wheat Associates and the Wheat Marketing Center. With some relaxation of the pandemic, we are also resuming in-person outreach with our offshore customers. What we have been discussing, though, is what we may need to do in the event that assessments remain low for an extended period. Add to that equation the record high inflation we are all witnessing. Our reserve funds have decreased in value greatly over the last year and a half, not so much from spending, as from currency devaluation. So our mission over the next year is to talk with the grower base on the research, market and grower programs that we fund, assure the value of those programs to the growers and identify means to ensure they are sustained long term. It is the goal of the Oregon Wheat Commission to get the grower the best possible bang for their dollars while leaving as many dollars in the growers' pocket as possible. From my perspective, I believe we are doing that. Ultimately, if we are to continue to sustain programs, though, we will have to analyze our rate structure; a subject that will never be pretty nor popular, but unfortunately like so many distasteful things in life it is a requirement.

On to better topics. Of the great number of groupings that I stay extremely grateful to, I have neglected to mention the vast number of hard working Americans who quietly

go about their lives, acting responsibly toward their fellow citizens, providing all the goods and services that we all need and generally keeping the wheels on the bus. They don't often get recognition for just being great citizens and neighbors, but in my world they should. You will certainly never hear about them from any media, nor are they expecting any notice. But in the world we find ourselves in currently, I think it is absolutely reasonable to say thank you to a group of people who work hard and take care of themselves, their family, their neighbors and community. In an environment of ever increasing identity politics, the ones who don't ask for anything but to be left alone to pursue their dreams on their own dime are a treasure. I believe it to be an affliction of an affluent society that we can spend so much time and ink and cyber space and public resources dealing with so many different needs outside of the basic needs of food and shelter and health. I also believe that part of the original contract for personal freedom had a healthy requirement for personal responsibility and accountability. Things that a couple of wonderful grandparents who had been through a great depression, a couple of world wars, and a few smaller global events patiently explained to me during my formative years. Which is exactly why I appreciate so much the selfsufficiency and independence of the people that I am talking about. When you find that the news of the day makes you want to tear your hair out, remember that the great silent majority of people are helping to carry the load without complaint and they are not seeking anything other than their freedom to live their lives responsibly.

This will probably be my last article in this magazine, so for those of you who actually have read any of them, I wish to offer my most sincere sympathy. And though it is nearly impossible today to not offend somebody with speech or writing, I hope that I have kept the body count as low as is humanly possible.

"Some people wonder all their lives if they've made a difference. The Marines don't have that problem."

Ronald Reagan 📳

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Carbon Sequestration and Soil Health

Francisco Calderón, Director, Columbia Basin Agricultural Research Center, Adams, OR



Research the Columbia Basin Agricultural Research Center

Long-Term Experiments (LTEs) CBARC, some of which were started in the 1930s, are amongst the earliest existing agricultural experiments in the U.S. Grower assessment funds have been essential for funding

the LTEs in recent years. The LTEs are a vital part of the work required to quantify important aspects of our agricultural systems, including crop yield, soil carbon and soil health, weed control, and wheat diseases under different dryland grain production managements.

Carbon sequestration and soil health in dryland grain production systems.

Soil health is an evolving concept that incorporates soil fertility, soil structure, and soil biology. The USDA NRCS describes soil health as 'the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans'. The main idea behind a healthy soil is a system that maintains high crop yields in the long term, while preserving biological diversity and safeguarding environmental quality. Each cropping system, geographical area, and soil type is bound to have its own soil health attributes. The concept of soil health can be a useful framework to wheat growers and researchers because it portrays soils as a living entity. The environment of the Pacific Northwest dryland wheat production region has a unique set of agronomic concerns and requires a different soil management approach compared to other areas. For this reason, the importance of the LTEs has become evident, because they are the ideal venue to define soil health and what it means for the local soils under dryland grain production.

This year, we focused some of our soil health work on the Crop Residue Management experiment, which was started in 1931. These research plots are evaluating three wheat straw managements (not burned, fall burned

CONTINUED ON PAGE 16

Researchers' Names:

Francisco Calderón, Surendra Singh, Stephen Machado, Christina Hagerty, Judit Barroso, and Ryan Graebner

2021 Grant Titles and Funding Levels:

Long-term dryland rotations and their effect on carbon sequestration and soil health. OWC support for this grant was \$100,000 in FY 21.

Grant summary:

Long-term research experiments (LTEs) are an invaluable tool to inform management decisions because they can be used to document the timeline of changes in soil quality, grain yields, weed issues and pathogen incidence. New measurements, as well as data from archived soil and plant samples, can be used to predict the effects of management decisions in dryland farms for the PNW region and beyond. Residue and fertilizer management can affect soil quality, weeds and diseases, but these effects can take years or decades to appear. For example, long term regimes of reduced tillage and N fertilization can result in soil acidification near the surface, which in turn can affect crop productivity. In addition, conservation practices like residue retention and reduced tillage can play a role in net accumulation of organic matter in the soil. The LTEs at the Columbia Basin Agricultural Research Experiment (CBARC) are an invaluable resource that can open the door for collaborative work between CBARC scientists, university faculty, and federal researchers. The objective of this work has been to compile the data from the most recent soil samplings, as well as obtain new data to set the stage for a new federally appropriated project about soil C sequestration at CBARC. For example, it is important to document how much soil pH stratification has occurred to date in plots under reduced tillage. Another objective aims to test and apply new spectroscopic techniques to measure soil C and soil quality in the LTEs, cheaply and rapidly. We anticipate that measuring soil C by spectroscopic analysis will allow us to get a detailed picture of how agricultural practices are affecting C sequestration and potential marketing of the carbon cash crop, while improving soil quality and achieving high grain yields.

Introduction to the article and how it relates to grant work:

The LTEs at the Oregon State University's Columbia Basin Agricultural Research Center (CBARC) are a precious resource that shows how agricultural practices affect dryland grain yields with locally relevant factual information. This article details recent research at CBARC, and shows what kinds of activities we are planning for the coming years. For example, we have documented how much soil acidity has affected our plots under reduced tillage, which is a potential threat to wheat production for the region. In addition, we show how scientists at CBARC are devising new ways to measure soil C and soil health quickly and inexpensively. These new techniques will allow us to increase our data output and get a full picture of how management practices affect the potential marketing of soil carbon, while improving soil health.

OREGON WHEAT

CONTINUED FROM PAGE 15

or spring burned), three fertilizer nitrogen rates (nothing added control, 40 lbs/acre and 80 lbs/acre), a manure amendment and a pea vine amendment, all under a wheat fallow rotation. We measured several soil variables (compaction, total carbon, and electrical conductivity), as well as crop performance. In addition, we used new spectroscopic laboratory methods to evaluate changes related to overall soil responses to residue and fertilizer rates. Grain yield data shows that the long history of manure application has improved the fertility and productivity of these soils. The 40 lbs/acre fertilizer N rate saw an increased grain yield, but there was no increase in yields from additional N beyond that. Soil compaction was sensitive to organic manure and pea vine amendments, indicating that it could be an important metric to use in our soils. Thanks to the spectroscopy work, we are learning about how increased soil health and productivity are affecting specific soil chemical changes, not just the soil total carbon content. Soil health indices that are being used at the national level do not necessarily work in our neck of the woods, so these results will help us to understand what constitutes a healthy soil in our dryland agricultural soils.

Testing for nutrient stratification in regional wheat systems

Carbon sequestration involves the net gain of carbon, mainly from the atmosphere into the soil. Redistribution of carbon to the soil surface in soils under no till (NT) may or may not constitute a net gain of carbon in the soil profile when deeper soil layers are included in the assessment. For this reason, one of the research themes in our soil carbon studies will be to document how much soil stratification has occurred to date in plots under reduced tillage. Stratification of soil acidity and nutrients is a common occurrence and growing concern among regional wheat growers, and is now showing up in both tilled and NT. In NT systems, nutrients



Research plots at CBARC.



CBARC staff sampling soils.

accumulate in the topsoil layer over time, which alters soil chemical, biological, and physical properties. Shallow soil layers can have increased soil acidity due to the placement of nitrogen fertilizers, and this low pH affects root growth and nutrient availability. Given that growers in the region operate on thin profit margins, a small yield reduction can have a negative economic impact. We believe that basing fertilizer rates on soil sampling of nutrient-stratified soil may lead to over or under fertilization, resulting in adverse economic and environmental impacts.

Studies are being conducted to assess nutrient stratification/redistribution under different long-term tillage and N rates applications in wheat systems. This latest research effort has yielded some important information. The CBARC researchers are focusing on an ongoing longterm wheat-pea study to evaluate the influence of two tillage treatments (moldboard plow and no-tillage) and two soil sampling strategies: Fine-scale soil sampling (every 2 cm depth) vs. conventional soil sampling (every 10 cm). Last year, several soil biological indicators related to soil organic matter chemistry and microbiology were measured for the different depths. Our data shows that sampling depths influenced the management-sensitivity of the soil health data. Finer sampling scales are needed in order to fully understand how agricultural management affects soil quality. In addition, our results show that stratification of soil health properties, in addition to soil acidity, is present, especially under no-till systems.

Conclusions

The wheat industry in the region is at the cusp of being able to factor in payments for carbon sequestration and soil improvements. The scientists at CBARC, Pendleton are in a great position to start answering questions such as: What kind of information will growers need in order to take advantage of carbon markets? What agricultural management practices

will allow for tapping into other revenue sources for soil health improvements? The value of soil health indicators can only be appropriately tested in controlled multi-year experiments. The LTEs provide the experimental design and consistency of treatments that can help to determine what soil qualities are associated with high yields and farm profitability.

If you have questions about our research at CBARC, or about dryland wheat production and soil health in general, please feel free to reach out. I can be contacted by phone at (541) 278-4415, or by e-mail at francisco.calderon@oregonstate.edu.

NAWG Testifies at Farm Bill Hearings

National Association of Wheat Growers (NAWG) President Nicole Berg comes into the top leadership position just as Congress begins hearings on the Farm Bill in both House and Senate Agriculture committees. The role presents an opportunity for her to voice the issues and concerns of U.S. wheat farmers in preparation for the upcoming Farm Bill renewal.

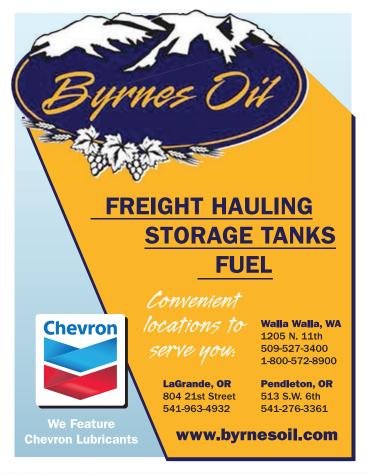
She has spent a few days in Washington, DC, including to participate in a hearing while she was Vice President of NAWG. On March 1st she testified in front of the House Agriculture Committee during a hearing to review Title I programs. During the hearing, she highlighted key improvements made during the 2018 Farm Bill and how those programs work for wheat farmers, emphasizing the importance of maintaining a strong safety net for farmers given the farm economy's cyclical nature. During the testimony, Berg noted how ARC and PLC do not adequately cover the cost of production and challenges that are negatively impacting wheat producers. "Supply chain issues and availability of inputs continue to present challenges for farmers. These challenges include rising prices and availability for fuel, parts, vital equipment, and crop protection tools that allow farmers to continue using climate-smart ag practices like notill," stated Berg.

Shortly after taking on the role of President for NAWG, she testified in front of the House Agriculture Committee's Livestock and Foreign Agriculture Subcommittee on April 6th, with a focus on the Title III programs. She highlighted the vital role international food aid programs have in stabilizing economies and populations impacted by climate change, famine, and war. She also discussed the critical role trade promotion programs play in helping U.S. agricultural products remain competitive on world markets and opened access to new markets, which boosts the agriculture economy and helps keep farmers in business.

MAP and FMD contribute an average of \$8.2 billion more in ag export revenue per year. However, MAP and FMD funding levels have remained stagnant for over 15 years. Berg highlighted a study that concluded doubling annual MAP and FMD funding; cooperators would increase their investments by 50 percent, creating yearly increases in agricultural exports by \$4.5 billion. The Title III programs are essential to building trust with buyers and end-users. "While there is still uncertainty about how the Russian invasion of Ukraine will impact world markets,

we know that the invasion will exacerbate global food insecurity. Our food aid programs are the best suited for U.S. wheat to help support the humanitarian needs of those involved," said Nicole Berg. "As the subcommittee continues to evaluate the 2018 Farm Bill programs, our food aid programs must receive continued support and the MAP/FMD programs dollars are enhanced to support cooperator needs."

On the Senate side, field hearings began in April. As Congress continues to have hearings on programs authorized under the 2018 Farm Bill, Berg and NAWG will continue to work with the Oregon Wheat Growers League and its members to help craft a Farm Bill that enhances trade and helps deliver American commodities to populations in need.



JUNE 2022

Stand up and Be Recognized!

We all know someone who deserves acknowledgment for their tireless efforts supporting Oregon wheat and now is your chance to nominate that person to receive well-deserved recognition. Each year the Oregon Wheat Growers League recognizes contributions from those who support the industry and are instrumental to our success. Awardees are recognized at the annual gala at the tri-state grain convention. We encourage you to consider nominations for the 2022 Oregon Wheat "Above and Beyond" award and "Distinguished Service" award.

- Above and Beyond: Presented to an individual or individuals who have repeatedly stepped up for Oregon's Wheat producers and gone the "extra mile."
- Distinguished Service: Presented to an individual or individuals for their dedication and service to the Oregon wheat industry.

Nominations are due by September 2, 2022 to info@ owgl.org. Nomination forms and more information (including details on past winners) can be found at owgl.org/awards.

Wheat Industry Applauds USDA Food Aid Support

The National Association of Wheat Growers (NAWG) and U.S. Wheat Associates (USW) applauded the Biden Administration's announcement on April 27, 2022 stating the U.S. Department of Agriculture and the U.S. Agency for International Development is providing \$670 million in food assistance to countries in need. Specifically, this announcement will utilize the \$282 million in the Bill Emerson Humanitarian Trust and USDA will provide an additional \$388 million through the Commodity Credit Corporation to help cover the

transportation costs. The funding will be spent on purchasing domestic wheat and other commodities as part of a food aid package to help feed people in countries experiencing food insecurity. The funding will also be used to cover the costs of transporting the commodities to their destination. NAWG and USW will continue to work with USDA on ways the industry can support the food aid programs, while advocating for policies that benefit and enable U.S. farmers to continue growing wheat.

Wheat Leaders Honored As Diamond Pioneer Ag Achievers

On April 19th, the Oregon State University College of Agricultural Sciences saluted farmers by announcing the 2021 and 2022 Diamond Pioneer Agricultural Achievement Registry honorees. The Diamond Pioneer Registry was established in March 1983 and recognizes the significant contributions of those who have served agriculture and related areas throughout a portion of their careers.

The distinguished list of honorees includes current Oregon Wheat Foundation Board Chair Dale Case, past Oregon Wheat Commission chairs and several Oregon Wheat Grower League members. Recipients who are also Oregon Wheat League members include: Dale Case, Tom McCoy, David Doerfler, Bob Newston, Alfred Pohlschneider, Clinton Reeder, and the late Dan Carver. Congratulations and thank you for your dedication to the industry!





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PNW Commissions Host U.S. Wheat Representatives

Amanda Hoey, Oregon Wheat CEO Photos courtesy of Lori Maricle, Washington Grain Commission; Brent Haugen, Wheat Marketing Center

In March, the Oregon Wheat Commission welcomed inperson visitors from the U.S. Wheat global offices for a U.S. Wheat Core Competencies training. The Commission joined U.S. Wheat Associates, the Washington Grain Commission and the Idaho Wheat Commission in hosting a dinner for representatives who had joined from U.S. Wheat offices in Casablanca, Seoul, Capetown, Rotterdam, Mexico City, Santiago and U.S. east and west coast locations.

The visit was welcomed by the Commission, following a lengthy period of international travel restrictions. "These are individuals who are key to our success in international markets. They are our first interface with customers, providing reliable technical services to promote Pacific Northwest wheat and support customers in maximizing use of the quality grain we grow," stated Commissioner Walter Powell. "They work hard for the Oregon farmer, as evidenced by their dedication to expanding their training to enhance an understanding of the tools available here in Oregon."

The event marked one of the first opportunities for producers newly appointed to the Oregon Wheat Commissioners to interface with U.S. Wheat staff. Commissioner Tyler Hansell stated his appreciation for those who had committed time for the visit, noting the importance of establishing and maintaining relationships. "The networking opportunities for the Commission was invaluable as these are the people working directly on behalf of Oregon wheat producers. I am looking forward to an opportunity to continue to further grow connections at the U.S. Wheat world staff conference in August".









Following the reception event, representatives from U.S. Wheat Associates interacted with technical specialists at the Wheat Marketing Center through hands-on activities designed to increase understanding of the end use product testing included in the annual crop quality report. During a presentation to the Wheat Marketing Center Board and partners following the visit on the Korean market, Shin Hak "David" Oh, a food and bakery technologist in the Seoul office, cited the equipment, experienced staff and comfortable arrangements made to support technical teams as key reasons he actively uses the Wheat Marketing Center to support customers.

The event with USW technical and marketing representatives also included conversation regarding changes taking place in the global marketplace and how both USW and WMC can be best positioned to provide technical and research capacity support. The Oregon Wheat Commission allocates a significant portion of assessments to market development in the direct dues payments to USW and WMC, supplemented with funding to support specific special projects.

Following the visit in Portland, the group then headed to North Dakota to discuss research techniques and on to the IGP Institute in Kansas for a review of wheat breeding and grading.









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Survival, Success, and Everything in Between

Pat Hayes with special thanks to all the team who made it possible: David Brewer, Caio Brunharo, Daniela Carrijo, Tanya Filichkin, Scott Fisk, Ryan Graebner, Margaret Halstead, Laura Helgerson, Javier Hernandez, and Ivan Matus



Even in barley, all good things come around. In this particular instance, it all started in 2018 at an Oregon Wheat Commission Research review, where I was presenting my research plan for the coming year. That plan involved adding OWC funds to the pool of resources that support the overall Oregon State University Barley Program, whose major emphasis

is on fall-planted malting barley. During the question-and-answer session, Darren Padget popped the tough question "what have you done for growers of spring feed barley in the dryland areas?" After havering a bit, I said I'd do an informal needs survey and would get back with a proposal. The biggest need identified by a sample of dryland spring barley growers was tolerance to imazamox herbicide residue in the soil. Clearfield fall wheat was just too successful – despite its advantages as a rotation crop, spring barley couldn't fit into rotation anymore: it died. The only good news on the horizon was "Survivor", and imazamox-tolerant spring barley released by Washington State University.

Survivor is actually as resistant to imazamox as single gene Clearfield wheat, but in order to avoid intellectual property issues it was deemed more appropriate to describe the variety as "tolerant" rather than "resistant". Furthermore, the variety

Researchers' Names and Titles:

Patrick Hayes, Professor

2021 Grant Titles and Funding Levels:

Oregon Barley Variety Development and Deployment. First funded in 2018/2019 at \$35,000.

Grant summary:

Project is designed to develop, test, and deploy barley varieties for Oregon. A primary focus for this project is the accelerated development of imazamox herbicide-tolerant varieties. Another objective includes leveraging funding from the malting and brewing industries to develop, test, and promote fall-planted and spring-planted malting types. These malting types can enter feed channels, assuming grower and buyer interest.



Photo 1.

was to be used only in rotations where imazamox soil residues were a concern. Direct application of imazamox to control weeds during the crop growth cycle was not intended for the WSU variety, although that was the intention of developers of an imazamox-resistant barley in Australia. Focusing this story on the north central dryland areas of Oregon rather than international intellectual property disputes, there was some production of Survivor in Oregon and growers were generally satisfied. The variety's tolerance of residual soil herbicide residues was fine – but improvements in yield are always welcome.

As plant breeders are wont to do – we decided to look for those yield improvements in crosses of Survivor and 07MWA-201 (an imazamox-tolerant sister selection of Survivor) with our own OSU varieties. Having obtained the necessary materials transfer agreement from WSU, the first parent we chose was "Lightning", a facultative growth habit variety with excellent resistance to diseases and pre-harvest sprouting, and potential for the craft malting industry. The second parent we chose was RCSL124, a selection developed nearly twenty years ago by a Barley Project graduate student – Ivan Matus - who was interested in improving drought tolerance by transferring genes from wild barley to cultivated barley. Ivan's results were published in 2003 and RCSL124 almost made it to variety release. In 2006 we did an on-farm trial with Tom McCoy near Moro, Oregon, where we compared commercial production of RCSL124 with Baronesse, the most popular dryland spring barley at the time (photo 1). RCSL124 hung



Photo 2.

in there, but at the time the consensus was "if it doesn't beat Baronesse, don't bother with it". So, we shelved RCSL124. Even though we persisted with several more years of test plots at the Sherman Experiment Station, nothing jumped out as a Baronesse replacement. But the genes of RCSL124 live on – this time passed on to progeny of the cross with 07MWA-201.

To expedite the process of developing a potential variety from the crosses of Lightning with Survivor and RCSL124 with 07MWA-201, we pulled out the stops and put the first generation (F1) of these crosses into our doubled haploid production pipeline. Doubled haploid technology captures haploid sperm cells and turns them into diploid plants – thus cutting years off the process of developing potential varieties. Tanya Filichkin manages the capturing and tissue culture parts of the operation while Laura Helgerson manages the greenhouse production of sperm donors and the resulting doubled haploids. Tanva and Laura produced a total of 339 doubled haploids (from the cross of OSU Lightning/WSU Survivor) and 72 doubled haploids (from the cross of OSU RCSL124/WSU 07MWA-201). We were pleased with these numbers - doubled haploid production is never a sure bet because the technique just doesn't work well with some barleys. That's when we decided to call this the "Successor Project". Besides, who just wants to survive when vou can succeed?

The next step was to confirm that the expected $\sim 50\%$ of the doubled haploids were resistant to imazamox herbicide. Fortunately, Daniela Carrijo joined our project as a post-doc at this juncture, and her husband, Caio Brunharo, joined the Crop and Soil Science Department as a weed scientist. They conducted greenhouse spray experiments with 1.5X the herbicide rate recommended for wheat and confirmed the expectation of resistance in \sim half of the doubled haploids (photo 2). To expedite the production of sufficient seed to go into field trials, we sent the 171 resistant doubled haploids to New Zealand in the fall of 2019 for seed increase. Laura

Helgerson managed the complexities of that seed shipment (and its eventual return). The seed increase allowed us to go into field trials, coordinated by Scott Fisk, in cooperation with Ryan Graebner, with the 171 doubled haploids at Corvallis and Pendleton in 2020. At both locations, the experiment was treated at 1X the recommended imazamox rate for wheat. Based on the data generated in these experiments we selected the 20 highest yielding doubled haploids with the best test weight and other characteristics.

In the initial greenhouse grow-out and in the subsequent New Zealand grow-out something rather curious showed up: some of doubled haploids were super-late to mature. This isn't what we expected in a facultative x spring cross! This piqued our interest and got our colleague Javier Hernandez (a post-doc at that time) involved in mapping the genes responsible for growth habit in the Successor population (which by this time we'd decided would be comprised of only the Lightning x Survivor doubled haploids). Incidentally, Javier, before coming to OSU, had been a graduate student of Ivan Matus' in Chile! Using data from 50,000 molecular markers (the 23 and Me equivalent in barley), Javier has identified the unique combination of genes that give rise to the super-late growth habit – which could have long-term value for barley as a cover crop. A paper describing this research is in the works.

Returning to the Successor variety development story, twenty selected doubled haploids were grown in 2021, in replicated trials at four locations: two on-farm (Ione and Kent) and two at experiment stations (Pendleton and Corvallis). These were again managed by Ryan Graebner and Scott Fisk, with Daniela Carrijo coordinating efforts (photo 3). Based on the 2021 data, we selected the top two doubled haploids (DH190346 and DH190481). In order to keep up the momentum, we decided to increase seed in an off-season nursery – this time in Chile withIvan Matus! Ivan works with the National Agricultural Research Agency (INIA).

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Photo 3.

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Laura handled the complex paperwork required to send seed to Chile, and after a few hiccups Ivan got the seed and did a spectacular job of increasing it. He harvested 190 lbs. of each of the two selections, packaged it up and shipped it to the US on March 24 with the appropriate paperwork. Things then went into a tailspin for a bit, what with the bickering of shipping agencies and customs inspectors. As the days slipped by and nothing changed at the DHL status website, we almost despaired that we wouldn't get seed back in time for planting in the spring of 2022. Finally, seven of eight boxes arrived at OSU, and the eighth box showed up a few days later. The delay did mean it was too late for Ron Holmes to plant, but thankfully Margaret Halstead, a graduate student with the Barley Project, was able to set aside her thesis writing for a day to rendezvous with David Brewer at a rest stop in The Dalles. After a successful seed hand-off, David planted ~ 110 lbs. of each of the two selections at the Emerson Dell Farm on Friday, April 8 – just in time for surprise spring snow (photo 4). Scott also ensured that we shipped 25 lbs. of each of the two selections to Washington State Crop Improvement for



Photo 4.

production of Foundation seed, in anticipation that one of the selections will merit release as a variety.

Fingers crossed that we will be successful in producing something useful for Oregon growers of dryland spring barley.

Wheat Marketing Center Continues the Educational Bridge with New Staff

The Wheat Marketing Center (WMC) made two key new hires in the last month, bringing familiar faces in the industry into the WMC in Portland, OR. The Oregon Wheat Commission is one of the charter members of WMC, with Commissioner Darren Padget serving on the Board as vice-chair. New staff support the three pillars of programming: technical training, research and crop quality testing. With a role in promoting U.S. wheat by demonstrating its quality and functionality, the technical services provided by WMC are critical in the interface between Oregon wheat producers and our international wheat industry partners.

On the operational side, WMC hired Liman Liu as Assistant Operations Manager, in preparation for assuming the Operations Manager position when Bon Lee retires in mid-2023. Liman has begun training with Bon on all operational aspects, including analytical testing and proficiency in milling, baking and Crop Quality project management.



Liman has extensive commercial baking and product development experience, having spent the last eight years at



Oregon Wheat Commission welcomes Mike Moran.

Dave's Killer Bread (now part of Flowers Foods.) Previously, she worked for BAKERpedia as a food scientist, researching new technologies and writing informational articles. She has also published refereed journal articles focused on the relationship of grain quality to end product quality. Liman earned her Master's degree in Food Science from Kansas State University. She also completed the AIB baking science program. Liman speaks fluent Mandarin.



In April, the Commission had the opportunity to welcome the second new addition to the WMC: Mike Moran. Mike was hired as the new Executive Director, succeeding Janice Cooper, who has led the Wheat Marketing Center since 2015. Mike's prior work includes managing a farmer-owned wheat flour company

marketed under the Shepherd's Grain brand, production for Grand Central Baking in Portland and Seattle, and directing procurement strategies for Oregon Food Bank. Mike served on the boards of several non-profits including the Bread Baker's Guild of America and Portland Farmers Market, as well as serving on advisory boards to the Northwest Food Processors Association and Feeding America. He holds a Bachelor's degree in community development from Portland State University.

Oregon Wheat expresses appreciation to Janice Cooper, whose leadership has ensured the Center serves a key role as a technical service provider, essential to providing value to our customers around the world.

Spring Work Photo Round-Up

Spring 2022 brought a range of unexpected weather conditions. Generally, any precipitation gives a nice boost to the crop, so we are excited to see a range of photos from our members. Take a look!









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RECIPE

Ground Beef Lasagna

With harvest around the corner, meals that are hearty enough for a crew, but can be made and frozen before hand to use in a pinch are extra important. This recipe makes two pans, so you can bake one now and freeze one for later!



INGREDIENTS

1 pound ground beef 2 (24 oz.) cans pasta sauce 1 (16 oz.) package lasagna noodles, cooked

1 (24 oz.) container ricotta cheese

1 (8 oz.) package mozzarella cheese, divided

1 large egg

INSTRUCTIONS

- 1. Preheat oven to 350°F. Spray two rectangular baking dishes with cooking spray.
- 2. In a large skillet, brown ground beef over medium heat until no longer pink; drain.
- 3. Return ground beef to skillet and add pasta sauce. Simmer over low heat for 15 minutes.
- 4. In a large bowl, stir together ricotta cheese, 1 ½ cups mozzarella cheese and egg.
- Assemble the lasagna: Spread about ½ cup of meat sauce on bottom of each pan. Layer noodles in bottom of each pan. Spread one-

- third of cheese mixture over pasta. Top with about 1 cup of meat mixture in each pan. Repeat layers twice, beginning and ending with pasta. Top with remaining meat sauce and sprinkle with remaining mozzarella cheese.
- 6. Bake at 350°F for 30-40 minutes. Let stand 10 minutes before serving.

Freeze one pan for later:

Cover unbaked lasagna with aluminum foil and place in a 1-2 gallon freezer bag. Label and date. When ready to use, allow to thaw in refrigerator overnight before baking.

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