

OCTOBER 2019

OREGON WHEAT

An Official Publication of the Oregon Wheat Industry

4

ATP - Upping Our Market Development Game

6

The Silk Road Re-Established

16

Selecting for Quality 2019:
What's going on under the hood?

OREGON WHEAT GROWERS LEAGUE
115 SE 8th St., Pendleton, OR 97801
Address Service Requested

OREGON WHEAT

OREGON WHEAT

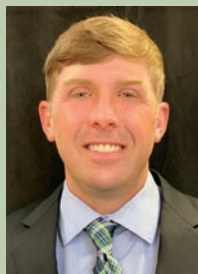
An Official Publication of the Oregon Wheat Industry



Alan von Borstel
President



Clint Carlson
Vice President



Ben Maney
Secretary/Treasurer



Brent Cheyne
Immediate
Past President

County Presidents

Deacon Heideman, Gilliam County
Rodney Cheyne, Klamath County
Kevin Corn, Malheur County
Erin Heideman, Morrow County
Ryan Thompson, Sherman County

Emery Gentry, Umatilla County
Wade Bingaman, Union/Baker County
Kurt Melville, Wallowa County
Josh Duling, Wasco County
Tom Duyck, North Willamette Valley
Collin Crocker, South Willamette Valley

Issue Liaisons

Jerry Marguth, Environment & Regulations
Walter Powell, Farm Policy & Transportation
Craig Reeder, Research & Technology

Ex-Officio

Dan Steiner

Staff

Blake Rowe, Chief Executive Officer
Shanna Hamilton, Director of Communications
Sally Christensen, Membership Director

IN THIS ISSUE

- 3 President's Half Acre
- 4 ATP – Upping Our Market Development Game
- 6 The Silk Road Re-Established
- 8 Photos from #WheatHarvest19
- 9 Wheat Industry Loses Longtime Supporter
- 12 In the midst of harvest life
- 14 Tillage and disease dynamics: can soil microbiome studies help farmers?
- 16 Selecting for Quality 2019: What's going on under the hood?
- 18 Update on Wildfire Work
- 21 To leave or not to leave?
- 22 Recipe: Pumpkin Yeast Rolls

Subscriptions

For address changes, extra copies, or subscriptions:
Oregon Wheat Growers League
541-276-7330 schrist@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.



OREGON WHEAT COMMISSION

Growers

Dana Tuckness, Ontario
Darren Padget, Grass Valley
Bob Newton, Helix



Walter Powell
Chair



Jerry Marguth
Vice Chair

Public Member

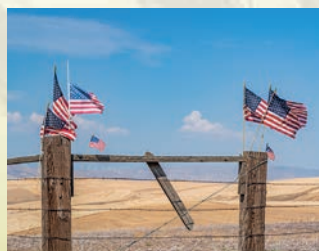
Travis Jones, Government and Public Affairs, Nike, Inc., Beaverton

Handlers

Jordan Van Zante, Export Handler, Pacificor, LLC, Portland
Jason Middleton, United Grain Corp., Pendleton

Staff

Blake Rowe, CEO, Oregon Wheat
Tana Simpson, Associate Administrator
Julie Nelson, Administrative Assistant



Cover:
Theresa Peterson



Alan von Borstel
President

“When Ted and Millie planted their first crop of wheat (1920), wheat was selling for \$2.50 to \$3.00 per bushel. The economy took a tumble after the war (WWI) and they sold their crop for 90 cents a bushel. They had not recovered financially when the depression came along. There was also a drought from 1929 to 1935. One year the crop only produced enough wheat for seed for their farm and for Ted’s brother Tuffy who didn’t even have enough for seed. During these difficult times, they cashed in their insurance and Ted also had a twenty-dollar gold piece which they used as down payment on land. In 1936 they had their first good crop. They had 18,000 bushels of wheat which sold for 50 cents a bushel. That was the beginning of easier times. During those difficult years Ted and Millie managed without borrowing money and had six children. Millie recalls it as hard times but good times.”

Unfortunately, almost a century later the never-ending woes of farming make me feel like Wile E. Coyote and the Road Runner off of the Looney Tunes cartoon. No matter how hard I plan harvest out with all the proper kits, parts and adapters purchased from the “Acme Company”, I always seem to end up with soot (hydraulic oil) on my face and a huge rock (hail) in the road in front of me. This year turned out to be no exception. The combine was ready to go with new rub bars and concaves installed, return grain processor rebuilt, header repaired, new spare sickle bar ready to go, axle extensions installed and rear tires filled with rim guard for ballast for a new lease with steeper ground to be harvested this year. Trucks were ready to go with new brakes and drums on one of the trailers. Oils changed, tires checked, greased, radios installed, bank-out wagon ready and then it happened. The bank-out tractor threw a code. The lights were coming on when turned off, the foot throttle wouldn’t work, the horn wouldn’t work until you turned the tractor off. The tractor wouldn’t shut off when you turn the key off, the lights and horn continue to work even after I pulled the fuses that had blown. And most importantly, the tractor refused to go into gear and move forward or in reverse.

I was suspicious of a bad ground wire or a back feed from a short. I checked every ground wire I could find and took the entire dash out of the tractor



and tested every switch. I also inspected every wiring harness I could find and finally gave up and called the dealer to bring out their new fancy computer from the “Acme Company” to tell us where the problem was. Three days later and they still had no answer. Meanwhile the Road Runner is happily harvesting away down the road. I finally decided to take the floor mat out of the tractor and inspect the only wiring harnesses left to inspect. During this inspection I noticed one frayed wire and decided to un-wrap the harness. Once I un-wrapped the harness I noticed the wires were blown apart and contacting each other. I saw something shiny in the harness, pulled it out to discover a high-powered rifle bullet in the harness. Lucky for my son and employee the caliber was larger than anything we own. The bullet had come from some distance and lost most of its velocity, entered through the open door, traveled through the floor mat without leaving a visible trace and was lodged in the wiring harness. We bought this tractor used, a year and a half ago with no problems until now. So how did this happen?

Who cares?! The tractor was repaired and running so let’s go catch that damn Road Runner. Then it happened again. Now we had oil running down the side of combine and we had not even gotten to the field. Turns out the oil cooler had decided to start leaking. It just so happens that the oil cooler is on the bottom of a stack of radiators, intercoolers, and oil coolers. Three and half days later with help from the “Acme Company” we had it back together and were in

- Continued on page 4

- Continued from page 3

hot pursuit of that damn Road Runner. With one full day of uneventful harvest under our belts, it happened again! The unloading auger decided that half-way out was good enough. Unfortunately, half-way out is most definitely not good enough. We had it fixed by mid-afternoon and onto another field. That same day thunderheads had been building all afternoon and the eastern sky was dark blue. A storm was definitely headed our way.

Then the sky opened up with hail like I haven't seen since 1992. We had over 1000 acres hit with marble size hail that lasted for 30 minutes. We spent several days letting the crop dry out and dealing with crop insurance adjusters that estimated the damage on 600 acres at 82-90 percent with the rest in the 40-50 percent range. This whole time the Road Runner is down the road harvesting away. Is it any wonder why the Coyote wants to get that Road Runner?

We had insurance that will cover most of the losses and the machinery is repaired and up and running, for



now. This makes me think back to what my grandmother Millie said in her book about the struggles she and my grandfather Ted went through and agree that there are "hard times but good times."

Maybe next year we will catch the Road Runner.
Beep, beep!



ATP – Upping Our Market Development Game

Blake Rowe, CEO, Oregon Wheat



Since early 2018, farmers across America have been suffering from trade disruptions and tariffs. In the summer of 2018, and again in the summer of 2019, the Trump Administration proposed programs to provide partial mitigation for these impacts. Each

program had three elements, the Market Facilitation Program (MFP, direct payments to farmers to help offset tariffs), the Food Purchase and Distribution Program (commodities purchased for donation to food banks, etc.), and the Agricultural Trade Program (ATP, federal funding for market development work). Most of the grower attention and media coverage has been focused on the two MFP efforts because they did, or will, provide immediate payments to farmers.

However, another key part of the mitigation effort has involved the additional funding for market development programs through the ATP. In 2018,

\$200 million was allocated to ATP, with another \$100 million tacked on as part of the 2019 program. Dozens of ag export and commodity related groups submitted requests for funds, including U.S. Wheat Associates (USW), and 48 groups received funding. Among the big winners in the competition for funds were the American Soybean Association (\$35 million total for 2018 and 2019 combined), U.S. Meat Export Association (\$28M), U.S. Grains Council (\$21M), Cotton (\$15M), and the Wine Institute (\$16M). USW received a total of \$10.8M, with \$8.2M in 2018 and an additional \$2.6M in 2019.

Most farmers would probably prefer "normal" markets over any payment program because payments rarely, if ever, fully compensate for the immediate impacts of tariffs. Long after the tariffs disappear, the uncertainty and damaged customer relationships will continue to impact farmers.

Oregon wheat growers know better than most how long it takes to develop relationships and trust with customers overseas because we have been doing this kind of hard work for decades. For nearly 40 years, most of our market development work has been done by

- Continued on page 6

GOT RYE? GET COAXIUM.



Start Winning the War on Weeds.

Sometimes performance is difficult to see. This, however, is a no brainer. The feral rye infestation in the untreated plot has taken over the wheat reducing quality and destroying any hope of a strong yield. On the left, CoAXium® Wheat Production System, driven by Aggressor® herbicide is healthy, clean of feral rye and brought home a lot more gross revenue/acre than the untreated check. If you've got rye, this season, get CoAXium®.

Go to www.CoAXium.com/performance to see more extraordinary field photos.



CLEANER FIELDS. HIGHER YIELDS.®

© 2019 Albaugh, LLC; CWRF and Limagrain Cereal Seeds, LLC.

CoAXium® and Cleaner Fields. Higher Yields® are trademarks of Albaugh, LLC; CWRF and Limagrain Cereal Seeds, LLC. Driven by Aggressor® Herbicides and Aggressor® are trademarks of Albaugh, LLC. Refer to the Aggressor® product label for complete directions and instructions. Aggressor® EPA Reg. No. 42750-313 AD030118

- Continued from page 4

working with other wheat states through USW. USW has a long and successful track record of combining grower dollars with funds from the Market Access Program (MAP) and Foreign Market Development (FMD) program, both key Farm Bill programs, to open, develop and expand markets for U.S. wheat. Anyone who questions USW's effectiveness in using these programs need look no further than our largest overseas markets. Japan, the Philippines, Korea, Indonesia, Chile, Columbia, Taiwan, Mexico, and China (pre-tariffs) have all been built through the education, training, technical assistance, product development, and promotion work paid for with grower dollars matched with MAP and FMD funds.

Unfortunately, the availability of MAP and FMD funds have been increasingly limited by flat funding in appropriations bills, combined with increasing competition from other crop groups seeking to use the programs. USW has had good projects every year that haven't gone forward due to funding limitations. The ATP funds will provide some welcome relief from the annual disappointment of leaving excellent projects on the "cutting room floor" due to limited funds.

USW's \$10.8 million of ATP funds, matched with some growers funds, will enable key projects to move forward all over the world, from now through 2022, but the lion's share will go to efforts in Southeast Asia,

North Asia, and Latin America where the populations, economies, and wheat consumption are growing. Each region and country are different, but USW has done an excellent job of tailoring the activities to match what customers need to expand potential markets for our wheat. Training for millers and bakers, technical consultants to work directly with customers in their own facilities, and product development work will be funded for many countries. Seminars on how to use the U.S. wheat grading and exporting system to purchase wheat with the specifications that will best fit a customer's needs and products will be provided. Many trade teams will be funded, both for customers to visit wheat producers in the U.S. and for our farmers to visit customers in their home countries. Support for baking schools and laboratories will help educate the next generation of milling and baking professionals in many markets and familiarize them with the advantages of U.S. wheat. Major support will be provided for regional and country specific conferences. The total list is long but suffice it to say that the activities reflect the cumulative experience of what has worked to drive demand for U.S. wheat in market after market.

Perhaps when the tariff "smoke" clears we will find that the extra seeds sown with the ATP funding will bear fruit in the form of greater demand, increased market share and better prices in the future. It has certainly worked out that way in the past.



The Silk Road Re-Established

Shawn Campbell

From as early as Roman times the Silk Road across the steppes of Central Asia was the primary trade route connecting Europe and the Middle East to the riches of China and Southeast Asia. For over a millennia the caravans traversing the Silk Road exchanged the silks and spices of eastern Asia for the gold and wealth of the western world, enriching the Chinese dynasties and ensuring their place as the most prominent and wealthy of the nations along the eastern shore of the Pacific. However, this all began to change in the fifteenth century when the growing Ottoman Empire cut Europe off from the caravans. Desperate to find new routes to China, the nations of Europe launched an age of exploration which resulted in the discovery of the Americas and the eventual European dominance over global maritime trade for centuries. No longer needed as middlemen, the Chinese dynasties withered, eventually collapsing completely in 1912.



Today China is a resurgent world power and once again a center of global trade. As part of its efforts to expand its trading networks, it announced in 2013 a plan it calls the Belt and Road Initiative (BRI). The BRI seeks to provide funding and loans for the creation and expansion of land-based transportation connecting China to Central Asia and beyond to Europe, as well as routes better connecting China to ports on the Indian



Ocean. As part of this effort, the BRI has targeted investments in the development of railways, highways, power plants, and ports.

The BRI was initially widely welcomed by many countries given that it would provide much needed funding for infrastructure projects needed to help spur economic growth. Funding that is difficult for many countries to get, especially the landlocked nations of Central Asia. However, there is also a growing distrust of the BRI, with many nations seeing involvement in the program being more to the benefit of China, rather than the targeted countries. It is widely believed that a significant reason China launched the BRI was to expand its economic influence outside of the Pacific Rim, where countries have long resisted Chinese economic dominance, and to lower the strategic importance of the current maritime trade routes to and from the country. Other suggested reasons for the BRI include helping China address excess capacity in its industrial sectors, a growing issue as the country's own infrastructure boom continues to slow.

Over the past several years many of the BRI projects have been stalled or cancelled, with reasons given ranging from financing issues stemming from high interest rates demanded by the Chinese, to contract disputes revolving around ownership stake and sub-contracting with domestic companies, to allegations of not following host government regulations regarding bidding on projects. However, despite such setbacks, some projects continue to move forward. BRI projects that have been completed, or are moving towards completion, include a new railway line in Kenya connecting the interior to the port city of Mombasa, a new road connecting China to the newly constructed port of Gwadar in Pakistan, new natural gas pipelines between several Central Asian nations and China, and a new inland port at Khorgos in western China on the border with Kazakhstan.

It is perhaps this last project, the inland port of Khorgos, that best presents one of the larger infrastructure challenges to China's ambitions. While China uses the same standard railway gauge as the

United States and Europe, 4.7 feet, the nations of the former Soviet Union use a gauge that is 3.5 inches wider. Historically this was done by the Russian czars to limit an invading forces ability to use Russian railroads, thus slowing down the movement of supplies to their foes. However, today it also creates an impediment to trade, requiring transloading of cargoes from one rail line to the other. While it is possible to move rail freight from Beijing clear to London, such a movement requires transloading at two points, once on the Chinese-Kazakh border, and then once again on the Belarusian-Polish border. While moving freight by rail is still faster than moving it by ship, the need to transload cargoes twice adds to the already higher cost.

Despite such obstacles, Kazakhstan has long been a major supporter of the BRI and hopes to continue boosting trade with its larger neighbor. Via investments by the BRI, Kazakhstan aspires to take full advantage of its natural resource riches, most notably oil and natural gas. However, Kazakhstan is even more interested in taking advantage of China's growing demand for agricultural goods, especially grains. Kazakhstan is a large producer of grains, especially wheat, but the sector has long been held back by the limited ability to export due to the country lacking direct access to ocean freight. Kazakhstan hopes to expand its grain exports in order to better diversify its economy and China seems like the best possible opportunity to allow them to do so.

Such a partnership is also seen as a positive by China, since it would allow them to better diversify their grain imports away from political rivals, such as the United States. In addition to China and Kazakhstan, Russia is also paying close attention to the development of improved rail-based trade towards the Pacific. Kazakhstan's major grain belt is in the northern half of the country, right along its border with Russia. Just on the other side of that border is Russia's Siberian grain belt, an agricultural area similar to Kazakhstan in that its growth and development has been stymied by its lack of access to major markets. The further opening of Kazakhstan to China automatically opens Siberia as well.

With China already the largest importer of soybeans in the world; and analysts predicting growing imports of wheat, corn, and other grains as time moves forward; every major grain exporter is focused on the opportunity that China represents. While this business has long been dominated by nations with a long history of maritime trade, the BRI is creating new land-based avenues of competition via the long-underutilized grain sheds of Central Asia. Though nobody can predict the future, it's hard to see a world where the BRI doesn't have some kind of affect on the world of grain.



#WheatHarvest19



Hansell Farms, Athena



Cranston Farms, Sherman Co.



Bracher Farms, Cold Springs



Blown Away Ranch, Ione



Barnett-Rugg Inc., Athena



von Borstel Ranches, Kent



4C Ranches Inc, Ione



Kamerrer Farms, Gilliam Co.



von Borstel Ranches, Kent

Wheat Industry Loses Longtime Supporter



Virgil (Virg) Lewis Choate passed away on August 14, 2019.

Virg graduated from Oregon State College in 1958, earning a degree in Agricultural Education.

Virg taught Vocational Agriculture in The Dalles and served as the FFA Chapter Advisor. Several

of his students/FFA members achieved the State Farmer Degree, the highest degree awarded to only a small number of members in the State. Virg was also the first Vo-Ag instructor in Oregon to allow girls into his classes before they were allowed to be members of the FFA.

In 1966, Virg began a 30-year career with US Bank as an Agricultural Representative. In 1995, he began working part-time for Columbia River Bank and then Columbia Bank until the age of 84.

Virgil was a long-time supporter of the ag industry. He boasted to OWGL staff once that he had missed the Oregon Wheat convention only once in 39 years when Oregon held its annual events in Portland. The OWGL awarded Virgil the Distinguished Service Award in 1973 and the Above and Beyond Award in 2002 for his many years of service to the wheat industry.

Virg also received a Diamond Pioneer Award from the Oregon State University College of Agricultural Sciences in 2010 for his work in the banking sector and his service to many agriculture-related organizations and events.

Virg will be missed by many in both the banking sector and the ag industry. His obituary can be found at www.andersontributecenter.com/memorials.



SAVE THE DATE:

DUNN CARNEY'S

EASTERN OREGON AG SUMMIT

Tuesday, October 15, 2019

Maxwell Event Center
Hermiston, Oregon

7:30 am – 12:00 pm
Additional details to come





Mid Columbia Producers, Inc.
Grain • Seed • Fuel
Lubricants • Farm Stores



Sign up today for
Member Benefit Fuel Program,
Call 541-330-8356 for details.

Main Office 2003 1st St Moro, OR 97039 Phone 541-565-3737 Toll Free 800-325-9327	Hermiston Office 345 N 1st Pl Hermiston, OR 97838 Phone 541-289-5015	Bend Office 913 NE 1st St Bend, OR 97701 541-382-4751 Phone 888-616-0690 Toll Free
--	---	--


www.mcpcoop.com

Proudly serving
our Rural Communities
for 75 Years.


We believe in the value of a
handshake, firm commitments,
and lifelong relationships.

WE SPECIALIZE IN
**Agriculture, Construction
and Commercial loans for any purpose.**

Rates & terms may vary. All loans subject to credit approval.



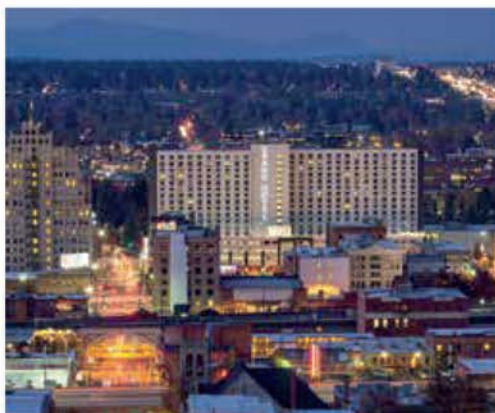
**Bank of
Eastern Oregon**





Nov. 13-16, 2019
Davenport Grand
Hotel, Spokane, WA

Register online
at wawg.org



For hotel reservations
call 800-918-9344

Located in the heart of Downtown Spokane, within walking distance of theaters, art galleries, spas, restaurants and outdoor activities is the home of the 2019 Tri-State Grain Growers Convention. The Convention Center and INB Performing Arts Center are connected to the hotel via a skybridge. The Spokane Veteran's Arena, River Front Park, Spokane River and Centennial Trail are all within walking distance.

Early bird registration
ends October 18, 2019

Chad Prather, Emcee

Chad Prather is known for his way with words. He is a comedian, armchair philosopher, musician, and observational humorist, often recognized from his fast-talking, rapid fire rants from the front seat of his truck. His current "Star Spangled Banter Comedy Tour" is selling out theaters all over America. Chad calls the Fort Worth, Texas, area home. He grew up working with horses and is often recognized by his ever-present cowboy hat.



Stephen Censky (invited)

Mr. Censky is the deputy secretary for the U.S. Department of Agriculture. He previously served as CEO of the American Soybean Association and in both the Reagan and George H. W. Bush administrations at USDA. Mr. Censky received his B.S. in agriculture from South Dakota State University and his postgraduate diploma in agriculture science from the University of Melbourne, Australia. He grew up on a soybean, corn and diversified livestock farm near Jackson, MN.



Peter Zeihan, keynote

Geopolitical strategist Peter Zeihan is a global energy, demographic and security expert. Zeihan's worldview marries the realities of geography and populations to a deep understanding of how global politics impact markets and economic trends. With a keen eye toward what will drive tomorrow's headlines, his irreverent approach transforms topics that are normally dense and heavy into accessible, relevant takeaways for audiences of all types.



Jim Morris, keynote

Jim Morris' journey is a testimony to the power of dreams and their ability to inspire and transform human life. Retired from playing baseball, the high school team he was coaching challenged him about giving up his own goals. Not much later he found himself at a big league tryout. After just three months in the minors, Morris was a major league player for the Tampa Bay Devil Rays. Now a role model to millions, Morris' memoir, *The Rookie*, was made into a major motion picture.



National update with Philip Brasher

Philip Brasher has reported on food and agriculture policy for more than 15 years and currently holds the position of executive editor for *Agri-Pulse*. He will be moderating a panel that includes representatives from U.S. Wheat Associates, the National Association of Wheat Growers, the National Barley Growers Association and the Wheat Foods Council.



Breakout session topics to include:

- Climate forecast
- Crop rotations
- Farm Bill program updates
- Tax law update
- Aerial applications
- And many more...

Auction and Dinner

Auction and Dinner is Friday, Nov. 15, at 6 p.m. Social hour starts at 5:30 p.m. Donation forms can be found at wawg.org.



NEW

OREGON WHEAT

membership benefit!



Card-lock Fuel Program for OWGL Members!

- Refund 1 cent per gallon to OWGL for every gallon of diesel or gas purchased by a member of OWGL when you sign up for the card-lock fuel program!
- Access to volume purchasing & potential savings on card-lock!
- 24/7 access at numerous locations!
- Free cost analysis on current card-lock purchase!
- Add fraud prevention features to any BOCI Pacific Pride fuel card.
- Also available to Associate members!

ASK US HOW!

Locations: Adams, Arrowhead Travel Plaza, Athena, Pendleton, Pilot Rock, Ukiah, Baker, Haines, North Powder, Walla Walla, Kahlottus, Milton-Freewater, Prosser, and George!

WWW.BYRNESOIL.COM

Byrnes Oil has been delivering Chevron Lubricants in Northeastern Oregon and Southeastern Washington for over 50 years. Pacific Pride franchisee for Northeast Oregon and Southeast Washington, currently able to offer our customers thousands of fueling sites. Byrnes Oil should be your petroleum supplier in Eastern Oregon and Eastern Washington.

FREIGHT HAULING STORAGE TANKS FUEL

Convenient locations to serve you:

Walla Walla, WA
1205 N. 11th
509-527-3400
1-800-572-8900

LaGrande, OR
804 21st Street
541-963-4932

Pendleton, OR
513 S.W. 6th
541-276-3361

www.byrnesoil.com

**We Feature
Chevron Lubricants**

Varieties that lead the industry. And lead you to better yields.

With AgriPro® brand wheat varieties continuing to push for genetic diversity, it's no wonder AgriPro makes up the largest portfolio in the wheat industry and consistently ranks in the top yield groups in every region. New releases show improved yield of 3 to 5% over current varieties. It's time to plant top-performing wheat varieties in your field.

SY Assure—Strengthen Your Returns
Flexible planting date and early maturity

To learn more, contact your local AgriPro
Associate or visit AgriProWheat.com.

AgriPro®

syngenta®

©2019 Syngenta. Some or all of the varieties may be protected under one or more of the following: Plant Variety Protection, United States Plant Patents and/or Utility Patents and may not be propagated or reproduced without authorization. AgriPro®, the Alliance Frame, the Purpose Icon and the Syngenta logo are trademarks of a Syngenta Group Company. 9APR0901 F-2

In the midst of harvest life

Wally Powell, Chair, Oregon Wheat Commission



Well, another harvest somewhat bites the dust. As I write (Aug. 21, 2019), I have not yet managed to completely cut any of the three fields around the house. But I am close. I am also frustrated enough that I am looking forward

to leaving for ten days. There is no way the blends mentioned below will be dry until early September.

I apparently seeded a blend of 101 and Prickly Lettuce on two fields; and a blend of Austrian Winter Peas and Prickly Lettuce on a third. Spraying was iffy this spring; and the fields stayed damp and cool forever in the draws. I had a fine stand of wheat, or peas on all the shallower lands, clean. I have yet to cut the blended areas as they are still too green; either the wheat/peas, or the prickly lettuce. This has been a good year for both the peas and the wheat, when grown as a monoculture. It has also been a good year for prickly lettuce, when grown on decent land with good moisture. I will let you know sometime in September how the rest works out. Outlook was promising when I cut the orchard grass hay this spring, I just knew I would swim through harvest.

All of this leads to a quote I borrowed for use in a note a couple of weeks ago. "They would come upon some 'suggestive' fact and then draw a conclusion from it. Then that conclusion would itself become a fact in their mind on which they built an entire course of action." In the future I will not equate a smooth afternoon of baling orchard grass for my wife's horses with anything other than a lucky and smooth afternoon baling orchard grass hay for my wife's horses. There will be no conclusions drawn; nor courses of future action determined.

Observations

There are times when it is better for my health if

I just observe; drawing no conclusions, determining no courses of action other than those immediately necessary. In the late 1960's, I was dispatched to help Key Brothers harvest their wheat. Key Brothers operated five IH 403 four-way leveling combines. Two or three had unfortunately fallen over on the steep hills along the upper Walla Walla River; later to be rebuilt as a winter project in the shop. There was steep; then you moved to Lloyd and Claude's land. Beautiful vista's looking out over the Valley, then on toward the Tri-Cities but a little bit vertical. That was the first time I saw a disk following a combine so the next combine could stop sliding on the straw by moving onto the disked ground. So, after a month of harvesting with Key Brothers, did I develop any conclusions or courses of action? Are you kidding...I was eighteen or nineteen years old; my combine didn't fall over; I had a date each Saturday night; I was in heaven! Life was simpler not weighed down by the years.

So, I will return to a time of greater simplicity. I'm seventy, but I am still breathing. I have a date with my wife on Saturday night, and my combine hasn't tipped over yet this year. No further facts, conclusions, nor courses of action are needed nor required.

A grower once told me he was pretty much comfortable with his wheat/pea rotation. His wife told him she was more comfortable when it rained on his wheat/pea rotation. That is a fact.

Notes

The OSU College of Agriculture Science is selecting a new Department Head for Crop and Soil Sciences. I will be observing and commenting, representing the Oregon Wheat industry. I will keep you updated as the process develops, and I look forward to hearing your thoughts.

By the time this article is published, we will have initiated the search process for a new Oregon Wheat CEO. I look forward to the process and welcome your comments on what kind of candidate we should seek to hire.

Six weeks until we start seeding and begin yet again.



Oregon

ANNUAL MEETING NOTICE

THURSDAY, NOVEMBER 14, 2019

Guest Speaker

SENATOR CLIFF BENTZ

Senator Cliff Bentz will speak at our Gala Banquet on the 2019 Legislative Session and discuss his thoughts on how to craft a Cap and Trade bill that works for agriculture and rural Oregon.

& MORE!

- *FSA representatives to discuss the MFP payments, ARC/PLC and other 2018 Farm Bill programs, & respond to grower questions.*
- *RMA will explain changes to crop insurance in the 2018 Farm Bill, including cover crop provisions and progress on a new approach to quality losses.*
- *Review of new guidelines from OR-OSHA on training farm employees about wildfire and firefighting safety.*
- *Review of recommendations from Governor Brown's Wildfire Response Council on how to improve Oregon's wildfire control system.*

OREGON
WHEAT

Tillage and disease dynamics: can soil microbiome studies help farmers?

Christina H. Hagerty, Assistant Professor of Cereal Pathology

I am coming up on my third year at the Columbia Basin Ag. Research Center – time has flown by and I am excited to report results from an Oregon Wheat Commission-funded project that was started my first year on the job. After starting in Fall 2016, I initiated a project to elucidate root disease dynamics in different tillage strategies. For a long time, farmers and the scientific community have been under the assumption that reducing tillage will lead to increased root disease. Theoretically, this assumption makes complete sense. When tillage is reduced, and crop residue is retained, there is more intact plant material for stubble-borne pathogenic fungi, such as *Fusarium* crown rot, to reside and potentially become an inoculum source for the next crop. Furthermore, when tillage is reduced or omitted, soil-borne pathogenic fungi that form vast fungal networks on the soil surface, such as *Pythium* and *Rhizoctonia*, are left undisturbed and could therefore be more established in the soil compared to when seedbed preparation activities disrupt fungal networks.

However, after we consulted the scientific literature, we found significant discrepancies in what other researchers have found: some studies have documented an increase in plant disease after adopting no-till technology, as theory would expect, while other studies have shown that reducing tillage can reduce soilborne disease. The same disagreement is evident when we discuss tillage and disease dynamics with farmers: some



Duncan Kroese, carefully collecting soil cores for pathogen quantification.

Columbia Basin producers have noticed an increase in root disease after reducing tillage, and others have noticed the opposite. When discrepancies like this are apparent, it is the perfect time to conduct a study and attempt to shed light on the situation; and perhaps approach the research question from a different angle.

To help address this issue, we initiated a study in fall 2016 to

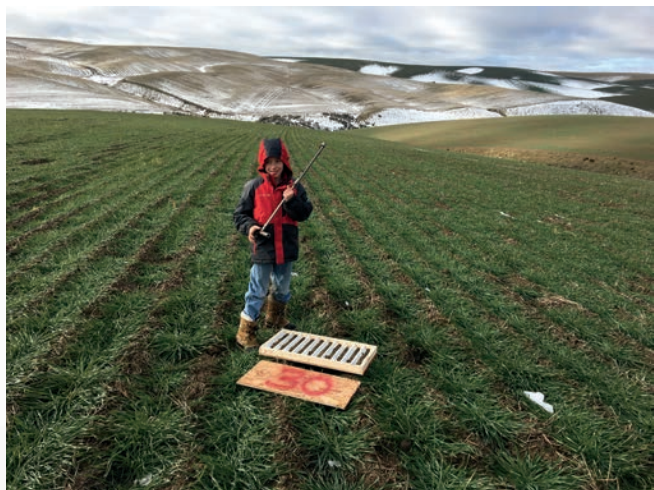


Christina Hagerty talking to Chris Williams during planting 2018.

investigate tillage and root disease dynamics by visiting 30 fields spread evenly across Umatilla County, spanning 9 inches of rainfall to 16 inches of rainfall. At each field, we collected extensive soil samples and documented the tillage strategy utilized by the farmer. Then, we extracted *Fusarium*, *Pythium*, and *Rhizoctonia* from the soil samples, and related relative abundance of each pathogen back to tillage strategy. This process was repeated for the same 30 fields in fall 2017.

In Umatilla County, we found the rainfall zone of the field was a more important driver of soilborne pathogens than tillage. *Fusarium* dominated fields in lower rainfall zones, where *Pythium* and *Rhizoctonia* were more prevalent in high rainfall zones. Results of the study indicate that tillage was not a main driver of soilborne disease. Our main take home message from this study is: The benefits of adopting reduced tillage likely outweigh the risk of increased root disease.

No-till farming increases soil organic matter, water holding capacity, and water infiltration, while reducing fossil fuel consumption, and top soil losses. However, uncertainty related to pathogen shifts in no-till management has slowed the adoption of no-till farming globally. Research on no-till management is needed to equip growers with data-driven decision-making tools. Making changes in cultural practices on a farm can be expensive and risky! Our overall goal with research projects in the Pendleton Cereal Pathology Lab is to understand more about the very complex decision-



Uriah Raymond, helping with 2017 soil sampling. The soil sampling work was a wonderful opportunity for me to get out and meet so many wonderful Oregon Wheat farm families in the area.

making process farmers face on a daily basis, and conduct research so that on-farm decisions can be backed with rigorous data. The abiotic (non-living) results of no-till adoption are well characterized; some abiotic benefits of no-till are realized immediately (e.g. reduced fuel costs) but other abiotic benefits take time (e.g. increased soil organic matter). In contrast, biotic (living) results of no-till management are not well understood, and soilborne pathogen communities most likely take time to change as well. We hypothesize that after reduced tillage is adopted, it may take time for microbial shifts to occur in the soil.

This study has led us to new research questions that we hope to investigate on behalf of Oregon wheat farmers. In the future, soil microbiome work to look at the total bacterial and fungal community present in an agricultural soil may shed more light on soil microbiota management. Microbiota management with farming practices could be a key next step to understanding the resilience of a total farming operation and help identify key features to promote soil health. Soil microbiome studies are a very hot topic in science today, but can these studies be helpful for farmers? Time will tell! This will be a very exciting new area of research and we look forward to see how it can advance dryland farming.

This research was made possible by funding from the Oregon Wheat Commission and the USDA-ARS. Collaborating scientists on this project include: Chuntao Yin, Katherine McLaughlin, Tim Paulitz and Duncan Kroese. We thank the Oregon Wheat Growers League and the Oregon wheat farmers who allowed us to sample their fields.

2018-2019 Grant Title: Evaluating the effect of tillage of soilborne wheat pathogens in the six agronomic zones of the dryland PNW

2018-2019 Grant Funding Level: \$10,000

Summary: No-till or direct-seeding can be described as seeding directly into the crop stubble from the previous season without use of a traditional plow that turns and incorporates soil. No-till acreage is increasing in Oregon, with Columbia Basin wheat producers leading the way. A reduction in tillage can result in positive benefits and outcomes, including increased soil organic matter, increased water holding capacity, and even reduced fuel costs. Along with the positive outcomes of no-till or reduced tillage practices, low-input cropping systems management can cause shifts in crop disease profiles. There is conflicting evidence in the literature about whether reduced tillage results in an increase in plant pathogens. The same is true when anecdotal evidence from producers of the Columbia Basin is evaluated: some no-till farms have enjoyed a reduction in disease pressure after converting to no-till, while others have noticed an increase in overall disease pressure after adopting the no-till strategy. Reduced tillage is still a relatively new agronomic strategy; local research is needed to understand how tillage influences disease dynamics. To study the effect of tillage, in Fall 2016 we collected 10 soil samples from each of 30 commercial wheat fields representing a wide range of tillage and located across the six agronomic zones of the dryland Pacific Northwest. We will be evaluating the soilborne pathogen community in the collected soil samples. We currently have resources to process one sample per field. We are seeking funding from the Oregon Wheat Commission to increase the number of samples we can evaluate per field, as well as resources to re-sample fields again in Fall 2017. Results of this study will be applicable to conventional and no-till wheat producers, farming from 9 inches of rainfall to over 16 inches of rainfall in the dryland Pacific Northwest.

Selecting for Quality 2019: What's going on under the hood?

Dr. Andrew Ross, Professor & Dr. Teepakorn Kongraksawech, Research Associate



Dr. Andrew Ross

Many of the techniques the Cereal Quality Lab applies to cereal grains to assess their quality are well established and have been used for a very long time. As a result, the work that was required to get them to become accepted and then to be routinely applied is obscured by the mists of time. Also sometimes lost in time are the intricacies of interpretation that are needed

to truly understand what we are measuring. The cereal quality lab personnel apply constant vigilance to ensure that the methods we use in support of the breeding programs at OSU are the fastest, most reliable, and most cost-effective that we can create, or that we can adapt from advances made worldwide in other physical testing labs, be they cereals, clinical, or metallurgy labs.

Moisture content is arguably the most important measurement applied to grains. Moisture determines the proportion of the dry solids in a grain lot and hence economic value and is also indicative of the ability to store grain safe from the ravages of molds. Standard methods for moisture have been on the Cereals and Grains Association books since at least 1962. These methods seem simple enough: add the weighed sample, dry it at elevated temperature, reweigh it and measure the loss, bingo, moisture content. Not so fast buddy. Even the choice of temperature (103 or 130 deg C) and whether one- or two-stage drying is required took considerable testing. Some samples, e.g. soybeans, cannot be dried at 130 deg C because loss of non-water volatiles gives a falsely high moisture reading. The difficulty with oven methods, especially for high-throughput testing of breeding samples, is their aggravating slowness. A faster and well-established method is to use electrical capacitance measurements that refer to an internal calibration to air-oven methods to provide a fast moisture determination. The most useful advance was the introduction from the 1980s onwards of near infrared spectroscopy (NIRS) measurements. Like capacitance, NIRS methods also require calibration to a physical reference method. One of the most exciting advances in NIRS was the implementation of self-learning artificial neural networks (ANN) with centralized calibrations based on hundreds of thousands of reference samples. This advance has made our NIRS instrument

maintenance easier because the ANN calibrations are so robust, that they eliminate our need to run physical reference tests in-house.

Protein content is also vitally important in trade and functionality: In trade for the economic value attached to it, and in functionality because of protein's impact on manufacturing performance and end-product quality. The development of protein analysis capabilities followed a similar trajectory to moisture, the older slower reference methods coming first. But even these were not without their problems of interpretation. The Kjeldahl method, a viciously dangerous catalyzed digestion in boiling concentrated sulfuric acid, does not measure protein, but measures nitrogen (N) released from all N-containing molecules in the material. In practice a multiplication factor of 5.7 is used to convert wheat grain and flour N content to protein. The alternative alkaline distillation "biuret" method actually measures the peptide bond in proteins but was never widely deployed in cereals, likely as a result of the circumstance that it was being updated for ease of use around the same time as the NIRS methods were beginning to come on line. Although reference methods are still needed for NIRS, the non-destructive and safe measurement on the NIRS systems was highly preferred to Kjeldahl. No-one wants to carry a flask of boiling concentrated sulfuric acid around the lab! One other advance in protein measurement was the widespread deployment of the "Dumas" combustion method for measuring N. This reference method is easier, safer, and faster than Kjeldahl but does require substantial capitalization and dedicated maintenance. But there was a trick in the tail switching to this new method. The N is released more efficiently by pyrolysis in the Dumas method than by the acid + catalyst digestion in the Kjeldahl method. This leads to small, but significantly higher N contents in samples tested by the combustion method. Once converted to protein this translates to an apparent increase in protein of around 0.2% in samples tested by Dumas combustion. One more trap for the unwary.

Hardness seems to be the simplest measurement but is not without its challenges too. The first "single-kernel characterization system" was a method of assessing the force to crush kernels between the molars, reported in the New South Wales (Australia) Agricultural Gazette in 1896, really just a codification of what farmers and millers had been doing for millennia. It is crucial to note though, that this test was a purely compressional, with no shear component. This test was rapidly (?)

superseded by a granularity measurement known as particle-size index (PSI) in 1935. Notably PSI is a test that grinds the grains in a steel burr mill and applies both crushing (compression) and shear forces and is arguably a better proxy for flour release in a mill than simple crushing. When I started in the wheat industry in 1984 PSI was the only really accessible way to measure wheat hardness in small breeders' samples. NIRS remains in use to estimate hardness but, again, needs to be calibrated against a reference method. In the 1990s the USDA labs in Manhattan KS developed

2018-2019 Grant Funding Level: \$65,000

Abstract: The OSU cereal quality laboratory provides benefits to Oregon grain growers, food producers, and consumers by working with our cereal breeders to improve the quality of varieties bred at OSU. Activities include early generation screening for appropriate hardness/softness, water absorption characteristics, polyphenol oxidase activity, and appropriate dough strength & bread- and cookie- baking potential. We use a micro-milling procedure, developed in-house in a previous funding cycle, for early-generation high-throughput screen in soft white nurseries. We are beginning to explore the concept of monitoring stability of quality over diverse locations using advanced statistical techniques. The quality laboratory continues its commitment to supporting other OSU cereal research that requires quality testing at no additional cost to the OWC or the companion programs, other than the costs of specialized consumables. Additional to the quality laboratory, OWC funded work investigating the levels of the amino acid asparagine in wheat is proceeding. Asparagine dictates the level of acrylamide in cereal foods after baking and acrylamide is a concern to our customers. The study is to establish a preliminary database of the levels of free asparagine in Oregon grown cereal varieties across multiple environments. We propose to quantitatively screen elite cereal genotypes for the presence of free asparagine using nuclear magnetic resonance spectroscopy (NMR) techniques, leveraging the equipment and expertise of the OSU NMR Facility.

what became the Single Kernel Characterization System (SKCS). We have two of these instruments and run thousands of samples through them each year for the breeding programs. The primary measurement is the "hardness index", based on an algorithm related to the raw crush-force profiles of each kernel in a sample of up to 300 kernels. However, the SKCS only applies a crushing force and therefore differs from the crushing AND shear forces applied in milling. So, although the SKCS works well there is still some imprecision in estimating milling performance. One advantage of the SKCS is its ability to provide measurements of kernel diameter, kernel weight, kernel moisture (via electrical capacitance), and the variability or uniformity of the bulk sample. This is especially helpful in hard \times soft crosses where high variability is sometimes indicative of a line that is segregating and is discarded.

The three tests highlighted here are emblematic of the circumstance that even though many of these tests are well established and apparently routine, vigilance about their limitations is vital to ensuring the breeders get the data they need and that interpretation is not extrapolated beyond those limitations.



Sinclair

Let us help your business *GROW* with **Sinclair** Lubricants

HATTENHAUER ENERGY CO.

Lubricants Grease DEF Antifreeze

201 W. 1st Street The Dalles, OR 97058
541-296-3515

Miller Oil, Inc.
2158 NW O'Neil Hwy
Prineville, OR 97754
541-416-1078

Shortstop Xtreme
1709 Gekeler Lane
LaGrande, OR 97850
541-910-7134

Update on Wildfire Work

Blake Rowe, CEO, Oregon Wheat

The severe wildfire season of 2018 and the extensive damage to wheat fields in Wasco and Sherman Counties resulted in a variety of priority tasks for the Oregon Wheat Growers League. Some were immediate post-fire efforts like getting federal disaster declarations. Others were longer-term efforts like reviewing the safety training needed by farm employees who might be involved with wildland fires. With a little more than a year behind us, we thought it would be a good idea to give growers an update on what has been accomplished and what work remains. We have had a great deal of help and support with these efforts. Our Congressional delegation, especially Senators Wyden and Merkley and Congressman Walden, Governor Brown, State Senators Bill Hansell and Betsy Johnson, many County Commissioners, USDA, the Oregon Department of Agriculture, OSU Extension, and many wheat growers played important roles. Growers who worked directly on the fires, made the time to tell their stories, contact legislators, attend meetings and advocate for needed changes the Oregon's wildfire system.

Immediate Post-Fire Work – As noted above one of the early tasks was to seek support for a federal disaster declaration. The declaration was a key step to getting access to certain types of federal funding to help with recovery and reconstruction, as well as emergency access to CRP lands for grazing and haying to help replace burned grazing land. The League was only one of many voices that weighed in, but the League was the most direct voice for wheat growers in the burned areas.

A second immediate need was to get an allowance from RMA for summer fallow growers could plant cover crops to help protect the soil, without being reclassified as continuous cropping for crop insurance purposes. In addition, we helped facilitate access to surplus wheat seed from OSU variety trials that could be used for cover crop plantings.

We also engaged with Senator Hansell about our various wildfire concerns and helped him craft legislation that would address these concerns.

Each of these efforts were successful, helping growers begin to recover from the fires.

Review of Safety Training Needs – The tragic death of a farmer while fighting the Substation Fire and the resulting investigation by OR-OSHA, triggered concerns in wheat country that OR-OSHA might

- Continued on page 20

WORKER HEALTH AND SAFETY



Fighting farmland and rangeland wildfires

*A reference for employers
engaged in Oregon OSHA's
Agriculture (Division 4) Activities*



DCBS

Consumer and
Business Services
Oregon OSHA



OSU WHEAT

**Proven
Performance**

**Superior
Genetics**

**Reliable
Research**



Bailey Jenks

**Cereal Variety Outreach
Coordinator**

(541) 737-5870

bailey.jenks@oregonstate.edu



Northwest
FARM CREDIT SERVICES



Ag is constantly evolving. So are we.

The businesses we finance – in farming, ranching, forestry and fishing – are ever changing. We embrace agriculture's dynamic nature and operate on the leading edge, interpreting trends, pitfalls and opportunities. When it comes to managing change, we're right there with you.

800.743.2125 | northwestfcs.com

Equal Housing Lender
This institution is an equal opportunity provider and employer.

Here to Help You Grow®

- Continued from page 18

decide to write extensive new rules concerning training and protective equipment for farm employees who might be involved in fighting wildfires or using fire on croplands. The League Board met several times with growers, helped host a sample fire training session for farmers and farm employees, and met or talked several times with key OR-OSHA staff. Senator Hansell was very helpful in setting up the first meeting between OR-OSHA and the League's officers and staff. While we hoped for a more active role in any OR-OSHA rule drafting effort, they did put together a new report that covers some of the important elements that should be covered in training farm workers who may be involved in working with fire. The OR-OSHA report can be accessed on the Oregon Wheat website (bit.ly/OR-OSHA-Fire) and will be reviewed at the next League Board meeting and the Annual Grower Meeting held during the Tri-State Grain Growers Convention.

Liability Relief – One of the ideas that Senator Hansell proposed was to pass legislation that would protect farmers who voluntarily fight fires from civil liability, similar to “good Samaritan” laws that shield people who respond to accidents and provide emergency aid to injured people. That concept became SB-290, which passed in the 2019 Session with strong bipartisan support and was signed into law by Governor Brown. The League successfully testified and lobbied for this bill on several occasions.

Governor Brown's Wildfire Response Council – In early 2019, Governor Brown signed an executive order creating a Wildfire Review Council (WRC), charging them “to review Oregon's current model for wildfire prevention, preparedness and response, analyzing whether or not the current model is sustainable given our increasing wildfire risks.” The WRC was to consider funding for wildfire response, our ability to respond to fires in protected, under-protected and unprotected lands, wildfire smoke and its health impacts, assistance available for communities affected by wildfire, and ways to better prevent, treat, and contain future wildfires.

The WRC created three committees, Suppression Committee, Mitigation Committee, and Adaptation and Recovery Committee, to work on different parts of the extensive mission laid out by the Governor. The League has a representative on the Suppression Committee that has been tackling the practical “boots and shovels” questions surrounding how to bring more firefighting resources, including more aerial assets like tankers, to the table, how to better coordinate firefighting policies and efforts with the BLM and USFS, and

whether it is time to require all under-protected and unprotected lands to provide a basic level of initial response to wildland fires. We have had wrestled with recommending other sources of funding and other approaches to budgeting to cover fire suppression besides the General Fund and the Emergency Board.

Initial drafts of recommendations from all three Committees have been shared with the WRC and work continues to refine and meld the three reports. More work and discussion remain before the September 30 deadline for the WRC to report back to Governor Brown.

What's Left to Do? – The immediate post-fire work is largely done, but we will continue to monitor to see if any problems develop.

The liability bill has become law, but there is still likely to be some rulemaking to implement the legislation, which the League will continue to monitor.

Safety training for farm employees is still a work in progress. The League Board will be looking at the OR-OSHA guidance document at its September 17th meeting and will give feedback to OR-OSHA. We will continue this discussion with growers at the Tri-State Convention.

The League Board will also review the Suppression Committee and WRC recommendations at their meeting on the 17th. Some of the ideas will be tough “sells” in rural Oregon and whether we support some, all, or none of the recommendations is an open question. Willingness to make some of these tough changes will be necessary if Oregon really wants to improve its wildfire response system. However, at this point all we can say is that we will stay engaged in the process, doing the hard work needed to protect the interests of Oregon's wheat growers and our rural communities.



To leave or not to leave

Senator Bill Hansell



Much has been written, discussed, opined, and debated about the 11 Oregon Senate Republicans who made the decision to leave, denying the Senate a quorum for nine days.

Since I was one of what became known as the “Oregon 11”, I want

to explain why I did what I did, and as I have tried to do with every decision I have ever made as an elected official. It is also important to explain the events leading up to that decision.

With all I have read or listened to, especially social media, I have come to the conclusion I am either a hero or a zero.

There isn’t much in between.

My purpose here is not to debate the merits and flaws of HB2020, the Cap and Trade bill, that precipitated the decision. I personally believe there were huge problems with HB2020 as it was written. But that is not the reason I walked.

My primary reason for leaving was the refusal of the majority party to refer this bill to the people for a vote.

Oregonians deserved an opportunity to vote on this bill. I believed the costs, the impacts, and the insignificant results in actual carbon reduction needed to be decided by the citizens, not the super-majority of one party.

There were two ways Cap and Trade could have gone to the voters. First, the legislature could have amended the bill to refer it. I believe such a referral was included in several of the 117 proposed amendments offered to the bill, but all were turned down by the Joint Committee on Carbon Reduction.

The second way was for the legislature to remove the infamous “Emergency Clause.” When an emergency clause is attached to a bill it becomes law upon signature of the Governor. That makes it much more difficult, although not impossible, for citizens to refer it to the ballot.

In my opinion, that is the sole reason the emergency clause was attached to HB2020—I was hard pressed to see any reason to justify an emergency—there was none.

Without an emergency clause, a bill becomes law six months after the governor signs it. In those six months, signatures can be gathered, and a vote taken prior to the bill becoming law.

The referendum process is a check and balance on the Legislature.

On Tuesday, June 18th, a good friend and member of the Senate Democratic leadership came to my office and asked me what it would take to keep me from “walking.” I replied, “remove the emergency clause from HB 2020. Let the people have the opportunity to vote on something this monumental. It needs to be on the ballot.”

The senator said that made sense and they would try and see what could be done. I believe my friend tried, but to no avail.

The Republican Caucus was also informed that three of our colleagues across the aisle were no votes, but we were unable to satisfactorily confirm their position.

On Wednesday, June 19th, two events happened which might have averted the walkout. The first would have been delaying the second reading of HB2020. The Oregon Constitution requires every bill be read three times before voting on it. The bill is first read by title only and then sent to a committee. If the bill survives the committee process, it comes back to the floor for the second reading again by title only, and the next day it is read for a third time and a vote taken.

Republican leadership urged the Senate President to not second read HB2020 in order for negotiations to continue. However, HB2020 was second read on Wednesday, with the emergency clause intact, and it would be third read the next day, June 20th.

That meant the walkout was on for Thursday unless negotiations could hammer out something of a compromise.

Three individuals began meeting on Wednesday morning at 10 a.m., and for the next seven plus hours came up with some kind of a proposal.

- Continued on page 22

- Continued from page 21

Those individuals were Senator Cliff Bentz, vice chair of the Carbon Committee, Nik Blosser Chief of Staff for Governor Brown, and Representative Karin Power, the Co-Chair of the Carbon Reduction Committee. Two Democrats and one Republican, working into the early evening.

Fifteen minutes after the proposal was presented to Governor Brown, House Speaker Tina Kotek and Senate President Peter Courtney, a call was made to Senator Bentz informing him that the proposal had been rejected.

Had either of these two events produced a different result, we would have stayed.

On Wednesday evening the emergency clause remained in the bill. A third reading would have denied citizens, for all practicable purposes, the opportunity to consider and debate the merits of the bill in the referendum process. I felt this was wrong and I joined my fellow Republican Senators in leaving and denying a quorum on Thursday.

That is why I decided to leave.

Sen. Hansell represents Senate District 29, which includes Wallowa, Union, Umatilla, Morrow, Gilliam, Sherman and parts of Wasco Counties.



Recipe

Pumpkin Yeast Rolls

Ingredients

- 1 large egg
- ¾ cup very warm water (approx. 120 degrees F)
- ¾ cup canned pumpkin, unsalted (or mashed, canned sweet potatoes)
- 1/3 cup vegetable oil
- ¼ cup sugar
- ¾ tsp. salt
- 3.5 cups bread flour or 3 cups plus 6 tablespoons white whole wheat flour
- 1 tablespoon gluten (optional)
- 1 package active dry yeast

Directions

1. Place ingredients in the bread machine in the order listed. Select the dough cycle and let the machine do its work. (Check early in the cycle to make sure the dough is not too moist or too dry and add flour or water as necessary.)
2. Divide dough into 18 pieces and shape into rolls.
3. Place in two 8" X 8" greased pans and let rise until double in size. Bake for 20 minutes at 375 degrees F.
4. Let pans sit for 5 minutes on cooling racks before turning the rolls out onto the racks.



Rolls freeze well for up to 3 weeks in a re-sealable plastic bag.

Servings: 18 (1 roll/serving)

Nutrition

One roll provides approximately: 155 calories, 4 g protein, 23 g carbohydrates, 1 g fiber, 5 g fat (0.5 g saturated), 11 mg cholesterol, 21 mcg folate, 0.5 mg iron, 100 mg sodium.

Note: Bread flour was used in the recipe analysis. The optional ingredient is not included in nutritional analysis.

Source: Wheat Foods Council



**IT IS RAINING.
IT IS WET, AND IT IS MUDDY.
SLUGS ARE IN THE FIELD.
GAME ON.**

Introducing your first defense for slug control: Ferroxx AQ slug and snail bait.

When the conditions are sloppy, charge in with our new waterproof formulation. It is rain, mold and water resistant and packed into pellets that are highly palatable to slugs, eliminating bait shyness. Unlimited number of applications per year allowed with no retreatment interval. Zero PHI, 4 hour REI. Residue (MRL) exempt.

Ferroxx AQ
Because you can't sit on the sidelines.

FERROXX
SLUG AND SNAIL BAIT
AQ



Neudorff North America
250-652-5888 • NeudorffPro.com

ALBAUGH CUSTOMIZED SEED TREATMENT TECHNOLOGY

Seed treatment performance and coverage brought to you by Albaugh
Customized seed treatment solutions based on your needs
and micro-climate brought to you by your Seed Retailer.



Albaugh is Delivering Value Through:

1. **Innovation:** Addressing current and future critical gaps by crop segment through enhancements to current inventions
 - BIOst™ Insecticide 100 providing New and Novel Wireworm Solutions
 - CoAXium™ Wheat Production System driven by Aggressor™ herbicide
 - Customized seed treatment offers
 - Collaboration that delivered an enhanced chickpea seed treatment offer for growers
2. **Performance:** Delivering products today that address customer & market needs proven performance against competitive seed treatment offers
3. **Value:** Delivering robust customized seed treatment offers based on proven performance



Refer to the product label for complete use directions and instructions. BIOst® and Resonate® are trademarks of Albaugh, LLC. Always use and follow label directions. EPA Reg. No. 84059-14-42750 AD No. 100616, EPA Reg. No. 42750-133 AD No. 110316