Grain and Rain

The average price for soft white wheat in Portland for December and January was $6.34 and $6.74 per bushel. Barley prices were $1.38 and $1.43 per ton for December and January.

Precipitation at the Sherman Station in Moro for December and January was 1.36 and 1.61 inches, respectively at 82%, and 110% of average. Precipitation at the station since September is at 75% of average. Average precipitation across Sherman County in December was 1.28 ranging from 0.83 in Kent to 1.59 near Rufus. January average rainfall was also 1.28, ranging from 1.01 in Wasco to 1.53 in Rufus. Precipitation at The Dalles Airport for December and January was 1.66 and 1.56 inches, respectively, at 61% and 62% of average. Average precipitation across Wasco County in December was 2.03 ranging from 1.13 in Antelope to 3.79 in Mosier. January average rainfall was 1.58, ranging from 1.02 outside of Dufur to 3.27 in Mosier. Rainfall over the last three months is at about average for the north end of Wasco and Sherman Counties, while the southern end varies from 70-90% of average.

Climate Outlook

So far La Niña has been relatively weak, but the weather pattern is known to push winter weather later into the spring. We could use more snowpack, current snow water equivalent (SWE) is at 68% of normal for the Hood, Sandy, and Lower Deschutes Basin. The atmospheric river event back on January 12-13 brought significant rainfall that decreased basin snowpack from December levels that were at 86% of average. Winter precipitation across the basin since October is at 97% of average, but much of it coming in the form of rain rather than snow. Across the north central region of Oregon November precipitation was at 116% of average, while December precipitation was at 78% of average with temperatures 3.4° F warmer than average. For our region February is forecasted to be 0.2° F below average and precipitation at 108% of average. March is likely to be 2.8° F cooler than average and precipitation at 102% of average. April precipitation should be at 95% of average and temperatures could be 2° F cooler than average. There is a 33% chance for below average temperatures over the next 3 months and a 33% chance for above average precipitation. Mountain snowpack should be at or above average by the end of March. Drought conditions over the next 6 months should remain unchanged with some areas seeing class 1 improvement.

New Wheat Film Features Familiar Sights and Local Farmers

The U.S. Wheat Associates recently created a short 25 minute film, titled “Wholesome: The Journey of U.S. Wheat”. The USW’s Steve Mercer said the 25-minute film shows how everyone in the export supply system works to maintain the character of American wheat. The film walks through the different steps wheat takes from being seeded, harvested, and shipped over seas. More importantly though the film features the people involved in every step of production and shows their care for the crop and the land that they farm. Both Darren and Logan Padget are featured in the film, along with familiar sights in Sherman county and along the Columbia River to Portland export terminals.
**National Wheat Foundation (NWF) National Wheat Yield Contest**

The National Wheat Foundation (NWF) is now accepting grower enrollment for the 2021 National Wheat Yield Contest. The contest is divided into two primary competition categories: winter wheat and spring wheat, and two subcategories: dryland and irrigated. The deadline to sign up for winter wheat entries is May 15th with an early registration deadline of April 1st. The spring wheat entry deadline is August 1st, with an early registration deadline of June 15th. The wheat contest is administered entirely online, and growers can register here: https://yieldcontest.wheatfoundation.org/

**World Wheat Outlook**

USDA expects total wheat exports to be up 2% from last year and 5% above the five year average. White wheat (mainly soft) export sales are 47% ahead of last year’s pace and 49% of the five year average as of January 11. Many wheat buyers have already shipped at least half of the wheat that was purchased. It is anticipated that Chinese domestic wheat consumption is up 11% from the five year average with increased use in livestock feed due to increased domestic corn prices. Exports to other countries, such as the Philippines (the largest buyer of U.S. soft white wheat) are up from last year as they have been trying to make purchases ahead of large purchases by China. Russia is still using a wheat export tax and will increase it for March 1 to June 30 deliveries over concerns of securing domestic food supplies and domestic price stabilization. The current tax of $25 euros or $30 per tonne is not being effective as prices and demands in the global market absorb most of the tax. Even with a tax increase Russia is still expected to export 13% more than last year. Ukrainian exports are expected to be down 17% from last year and 3% less than the 5 year average, partially due to a 13% decrease in wheat production in 2020 following drought conditions. Similarly, the EU has exported 17% less than a year ago and total exports are expected to be down 31% due to decreased production with drought. South America is a mixed bag with concerns too much precipitation in Brazil, while the wheat growing regions in Argentina remain very dry. Despite drought conditions Argentina has exported 33% more grain than a year. In the U.S. there is a chance of winter kill impacts on wheat in eastern Montana down into western Kansas and eastern Colorado where temperatures are expected to be close to sub-zero without any snow insulating the crop. Recent precipitation has relieved some drought in central Kansas and Nebraska, but the high and southern plains are being left dry. Planted winter wheat acres are up in those states, while Oregon has 30,000 fewer acres in 2021 than in 2020, and Washington is 50,000 acres below last year. Increased prices have caused an overall nationwide increase in the area planted with winter wheat by 5%.

**New book on the Biography of Wheat**

There is a new book out on the history of wheat, “Amber Waves: The Extraordinary Biography of Wheat, from Wild Grass to World Megacrop” written by Catherine Zabinski. Catherine is a professor of plant and soil ecology at Montana State University in Bozeman. Amber Waves covers the cultivation of wheat from its discovery in the Middle East through the current day.

**Grain Bin Safety**

Nearly two dozen people are killed each year in the U.S. in grain entrapment incidents. Around 80% of reported engulfment’s involve a person inside a bin when grain-unloading equipment is running. The biggest take away is to first try your best to manage grain spoilage to avoid the most common reason people enter bins. Grain spoilage can also produce “silage gas” that is essentially carbon monoxide. The gas can kill people inside of grain bins and can often take an additional life when a rescuer enters just to also get sleepy and succumb to poisoning. I called into a webinar on grain bin safety put on by the University of Minnesota, you can watch the recording here: https://www.youtube.com/watch?v=_g3o5dqEt5c I found it to be fairly informative with good safety tips and a sobering story of a firefighter that lost his own life on his farm due to a grain bin incident. More grain bin safety information can be found here: https://extension.umn.edu/farm-safety/grain-bin-safety

**New Wireworm Control Looking Promising and Registered for use in Oregon**

BASF has come out with the new pesticide Terraxxa to control wireworms in cropland, using the active ingredient Broflanilide as a new mode of action (Group 30). Terraxxa is now registered for use in wheat in both Washington and Oregon. Field trials are showing reductions in wireworms from 80-90%. Producers had previously been using the chemical Lindane for wireworm control, but was banned for agricultural use in 2007. Since then there have not been effective controls, other than neonicotinoids with seed treatment that only offer crop protection for a short period.
Aaron Esser, WSU Extension Agronomist, has found that wireworms can lead to a drop by 7-11 bushels in a 70 bushel crop. He has been running trials with wireworms and Terraxxa over the last five years in mainly spring wheat. Wireworm traps placed in the year following Terraxxa only detected two immature wireworms, while other treatments averaged 14 per trap. Aaron suggests using a combination of Terraxxa and neonicotinoids to reduce the risk of wireworms developing resistance. Producers should also determine how prevalent wireworms are in their crops before using treatments. Consider setting traps to detect if numbers are above the economic threshold to treat or not. Often wireworms go unnoticed until they get to high enough levels that they start impacting the crop, often on the highest yielding ground. More information, including how to trap wireworms can be found here: http://smallgrains.wsu.edu/wsu-wheat-beat-episode-1/ This link is for a podcast with Aaron and David Crowder at WSU discussing wireworm management, several resources are located under the show notes at the top of the webpage. Also consider searching “Wireworm Trapping” on YouTube for some good how to videos in creating and placing wireworm traps.

**Stripe Rust Outlook**

Given the weather in November and December of 2020 the stripe rust forecast is that susceptible varieties may experience a 20-40% yield reduction without fungicides. Fields with moderate susceptible or susceptible winter wheat varieties (stripe rust rating of 5 and above, UI Castle (5), UI Magic (6), Art Deco (5)) may need fungicide applied at the time of herbicide application. More updates will be out in early March, see the OWGL shop talks under events in this Newsletter, an update will be given by Chris Mundt at the March 31st shop talk at noon.

**2020 Government Payments**

2020 was a year for the record books with many producers feeling financial impacts from the pandemic impacting meat processing, commodity prices, and changes in consumer purchases. USDA took notice and 2020 was the 5th highest year in government payments to farmers in the last 45 years. 70% of payments in 2020 were for supplemental and disaster assistance programs. Is that a good thing though? Some farming advocates have argued that increased blanket payments often create inequities amongst producers as the larger operations tend to benefit the most, while the smaller operations can’t go as far with the payments and may be hurting more financially. Regardless, the outlook currently is that 2021 is looking like a lower year for government support with potentially a halving in payments from last year across the nation. USDA’s recent February 2021 Farm Income Forecast predicts that U.S. net farm income will decrease by 8% in 2021 from 2020. Net farm income was at the highest level in the past nine years in 2020. Payments could change with potential emergency payments with fires, livestock losses, and other extreme weather damages or other farming challenges that await in 2021.

**ODA Oregon Agricultural Statistics**

ODA recently came out with agricultural statistics and here are some of the highlights you might be interested in, more details can be found at https://oda.direct/agstatsdirectory

**Land Values:** In the last year there was a 1.3% increase in cropland values across Oregon to $3,120 per acre. Irrigated cropland increased by 2.6% at $5,430 per acre and non-irrigated remained the same at $2,220 per acre. Pasture in Oregon is valued at $760 per acre, up 1.3% from last year. Farm real estate values in Oregon increased by 1.2% and are now at $2,530 per acre. Cash rent expenses are at an average of $364 per acre across Oregon. The rate was $510 per acre in Wasco County for irrigated and $33 per acre for non-irrigated farm land.

**Cattle:** There were 13,800 head of beef cattle in Wasco County in 2020, the same as last year. Sherman County had 2,300 head, also the same as last year. In terms of cattle and calves in 2020 there were 22,000 in Wasco county and 3,500 in Sherman county.

**Wheat:** In regards to wheat across Oregon in 2019 (no data for 2020 yet) there were 740,000 acres planted and 730,000 harvested, with an average yield of 68 bu/ac. The average price for wheat across the state in 2019 was $5.73 bu, $390 per harvested acre, with an estimated value of production at $284,437,000. In 2019 there were 61,000 acres planted in Wasco county and 60,000 acres harvested with an average yield of 50 bu/acre. There were 160,000 acres of wheat planted in Sherman and 114,500 acres harvested with an average yield of 54.8 bu/acre.

**Hay! Don’t forget to test your hay**

Feed is the largest annual operating expense for livestock producers, so it is good to understand the quality of feed to design a nutrition program that is cost effective and efficient. Taking good hay samples and getting them tested can accurately determine if your cattle are getting the nutrients they need. First, determine the number of hay bales you have in each lot (bales of the same kind of forage harvested from the same field within a 48 hour period). Does your inventory match your livestock demand? The average dry matter hay intake is 2.5% of cow body weight. With lowering temperatures voluntary intake will increase. In colder temps forage needs should be based on 3.5 to 4% of cow body weight, also consider cow size, body condition, and forage quality. Most average winters in the Mid Columbia do not get cold enough for this to become a major concern, but single digit temps could be a problem. Low quality hay will
limit intake due to reductions in digestibility and passage rate - rumen microbes need high protein to process more feed. Collect random samples from 10% of the bales or a minimum of 20 samples per lot using a hay probe ($100-150 for a probe or borrow one from your extension office). Both Wasco and Sherman County Extension offices have hay probes that can be borrowed for free. Probes are 18-24 inches long and should attach to a cordless drill with a clutch size 3/8 to 3/4 inch. Make sure the tip stays sharp so it will cut cleanly through the bale for a proper sample. The probe should be inserted at a right angle to the outside circumference of the bale for round bales and into the center of the ends on square bales. Hay probes can get very hot during use so use gloves or let it cool off before touching. Mix samples in a bucket and then place about 1 quart into a plastic bag and ship to a forage testing lab. OSU has an up to date list of analytical laboratories serving Oregon that can be accessed here: https://beav.es/JPq search for labs that analyze feed and forage under plant analysis.

Forages are tested with wet chemistry methods or using near infrared reflectance spectroscopy (NIRS). Wet chemistry uses chemicals and heat to break down and isolate nutrients in the sample and is typically completed by a skilled lab technician. The test provides increased accuracy, but as a result is often more expensive. NIRS analysis using infrared light reflectance through the sample to determine nutrient values. Different nutrients reflect infrared light at different wavelengths that a spectrophotometer detects. The accuracy of the test is determined by the calibration of the spectrophotometer and the library of known corresponding nutrients. NIRS uses different software packages that vary in the crops and forage they can test. Mixed grass forages and grains are best tested with wet chemistry, while pure forage samples, such as alfalfa or a single grass mix, such as Timothy, can be tested with NIRS. Overall forage analysis tests will range from $20-40 per sample tested and will range depending on the number of and type of nutrients being tested.

The main tests that should be considered for determining forage quality and ration amounts include dry matter (DM), total digestible nutrients aka total energy (TDN), and crude protein (CP). Mineral tests every couple of years can help determine what sort of other nutrients should be considered for supplementation. Consider testing for nitrates and other contaminants as well. Beef cows in mid gestation require a minimum of 7% CP and 50% TDN. In late gestation demands increase to 8-9% CP and 55% TDN. Demand peaks following calving and during early lactation to 11% CP and 60% TDN. Save the highest quality bales for later in the year during calving and lactation.

Hay supplies going into 2021 appear to be adequate with a slight reduction in 2020 hay production offset by larger May 1 beginning stocks. Hay prices in late 2020 were slightly lower than a year ago for both alfalfa and other hay. Prices are projected to be below average in 2021 nationwide, but local prices may not reflect that. There is an expectation of less total hay demand as cattle numbers are projected to decline slightly in 2021.

**Livestock Markets**

Surprisingly cattle placement in December 2020 was actually up 1% from a year ago when it was anticipated to decline. Placement being the number of cattle placed into feedlots to be finished and then taken to slaughter. Cattle placements were the 2nd highest (lower than 2005) they have been since 1996. Cattle slaughter numbers are also up from a year ago. Beef production for the week ending on Feb. 6th was up by 28.3 mil. lbs. from a year ago. Beef production is anticipated to decline over the next three years after growth in cattle supply peaked in 2018. Producers have been able to keep production levels up despite declining slaughter numbers by placing more weight on animals, but the decline in cattle numbers are expected to be more reflected in production in the coming years. The number of cattle and calves in Oregon as of January 1st are 2.3% below a year ago and nationwide are down 0.2%. Feed costs nationwide are up noticeably from a year ago and are at the highest point since the fall of 2013. Export demand for corn is the primary reason, already the current volume is 75% of forecasted exports for the year with more than the half the year to go. Prices may come down if export demand slackens in the coming months. Beef prices are expected to increase due to the higher feed prices, along with less cattle production and a rebound of the economy coming out of the pandemic. The choice cutout is up about $8 from the week prior, but below record levels when the pandemic first started. While prices for consumers are up, live steer prices for ranchers are actually down by $8 per cwt from a year ago, but up a dollar from a week ago.

**Deadlines**

**CRP Sign Up Deadline**
The general CRP sign-up period runs from Jan. 4, 2021, to Feb. 12, 2021, and sign-up for CRP Grasslands runs from March 15, 2021, to April 23, 2021. SAFE (State Acres For Wildlife Enhancement) acres are available this year in both Wasco / Sherman Counties. Talk to your local FSA office for more details or to sign up.

**Annual Election Coverage Change Deadline**
The 2018 Farm Bill allows producers to annually make an annual election for Agriculture Risk Coverage (ARC) and ...
Price Loss Coverage (PLC). The deadline to change your election with Farm Service Agency from previous year’s selections is March 15th, 2021 which will be the program elected for the crop harvested in 2021 (Marketing Year 2021/2022).

Events
Agricultural Wildfire Refresher Webinar, Wednesday, February 10th, noon to 1:30
OSU Extension Service is putting on a free webinar to cover wildfire safety and prevention for agricultural operations and small landowners. The Lone Pine Rangeland Fire Protection Association and their partners will also discuss their fire prevention plan. In addition, the webinar will feature a roundtable discussion with fire managers in North Central Oregon on what producers should do when they have a wildfire and how they can best collaborate with first responders in suppression efforts. This webinar is one option for producers to attend an annual agricultural wildfire refresher in 2021 to meet Oregon OSHA requirements for producers with employees who engage in fire suppression. Certificates will be available for attendees. An online class will also be available soon. Producers and employees need to also receive some sort of initial wildfire training, though not expected to go through the same training as wildland firefighters. Additional OSHA requirements include having an emergency action plan for medical and fire emergencies, fire prevention plan, and job hazard analysis. More information can be found here: https://beav.es/Jo6 If you are currently in an RFPA and participating in wildfire training and refreshers you do not need additional training, however you do need to complete the required plans. You can register for the webinar here: https://beav.es/Jqv If you are interested in this training, but can’t attend please email me at jacob.powell@oregonstate.edu and I can keep you informed on trainings later this spring.

McGregor Grower Meetings
McGregor is holding free virtual grower meetings focused on irrigated crops on February 9 and Dryland crops on February 11 and 17th (repeat). 2 pesticide credits are anticipated per session for OR and WA. More information can be found here: https://www.mcgregor.com/news/save-the-date-for-mcgregor-grower-meetings/

Society for Rangeland Management Annual Meeting is going virtual February 15-18th
The Society for Rangeland Management is holding their annual meeting virtually for the first and hopefully last time. Usually the annual meeting is held in intermountain states. Being virtual means that producers here might have the time and money to attend and gain insights into managing rangelands and livestock. The annual meeting is February 15-18th. The conference only costs $100 for SRM members and $125 for non-members. There is a large diversity of topics including wildfire, precision technology, remote sensing, and more. For more information and to register use this link: http://annualmeeting2021.rangelands.org/

Spokane Ag Show goes virtual
Spokane Ag Show is going virtual in 2021. The show will take place February 23-25 beginning at 8 a.m. each day. Go to https://www.agshow.org/ for more information.

Anhydrous Ammonia Safety for Farmworkers
The AgriSafe Network is putting on a free webinar on Tuesday, February 23 from 10-11 am covering Anhydrous safety. Focus of the training is on anhydrous ammonia safety during transport and application, including the anatomy of the nurse tank and toolbar, safety inspection processes, hitching and unhitching safety, personal protective equipment (PPE), rural roadway safety, and first aid/emergency procedures. Register here: https://register.gotowebinar.com/register/6188041957843009550

OWGL & OSU Shop Talks
OSU and the Oregon Wheat Growers League have partnered for free virtual shop talks during January-March on the last Wednesday of each month at noon. January 27th featured Jacob Powell with Oregon OSHA wildfire requirements, the recording is posted on the OWGL website under shop talks, along with a link for more resources. February 24th features Russian Thistle management with Judit Barroso and grassy weed control with Ryan Graebner, 1 ODA pesticide credit anticipated. March 31st will cover stripe rust outlook and management with Chris Mundt. You can register at this link: https://www.owgl.org/shoptalks

2021 AMMO Farm Management Training Programs
The Washington Association of Wheat Growers puts on a special program every year with their Agricultural Marketing and Management Organization (AMMO) to help eastern Washington producers. They have two webinars a week through February 23rd. They are hoping to host a in-person Wheat College in Ritzville on June 15th. Detailed information and registration for future AMMO events can be found here: http://www.wawg.org/ammo-workshops/ Wheat Pete gave a presentation last week on The Building Blocks of Yield and the session recording is on YouTube at https://youtu.be/ob8h8Uf_w6k Peter, @WheatPete, is a world renown wheat expert from Ontario and is the resident
agrónomist with Real Agriculture. He posts a weekly podcast “Wheat Pete’s Word.” He is a regular on “Agronomy Monday” on Real Ag radio, Sirius Satellite Radio 147. Peter spent 30 years as the Ontario Cereal Specialist. He will also be presenting at Wheat College in June.

**Mental Health Training for Producers**
OSU Extension is hosting a short mental health training to help farmers, ranchers, and the people who work with them be aware of risk factors that contribute to mental health problems and also suicide in the ag community. The 90-minute QPR (Question, Persuade, Refer) training is designed to help you know what to look for, how to talk to someone who needs help, and how to get them the help they need. The training is free and they are offering 4 different sessions, each session is capped at 35 attendees. March 16th from 9:00-10:30 am, April 6th 12:00-1:30 pm, April 29th 6:00-7:30, and on June 3rd 4:00-5:30 pm. To register and to find out more information about ways you can help, visit the Farm and Ranch Stress Assistance Network at https://extension.oregonstate.edu/farm-stress Another great resource is the Western Region Agriculture Stress Assistance Program Clearinghouse that is full of resources, searchable by state and service type https://farmstress.us/clearinghouse/

## 2021 Hazardous Waste Collection Events

**Household Hazardous Waste Collection at The Dalles Disposal**
- February 20 – The Dalles 9-2 (Saturday)
- May 15 – The Dalles 9-2 (Saturday)
- August 21 – The Dalles 9-2 (Saturday)
- November 20 – The Dalles 9-2 (Saturday)

**Rural households & businesses**
- April 3 – Maupin 10-2 (Saturday)
- April 30 – Moro 10-2 (Friday)
- May 1 – Dufur 10-2 (Saturday)
- September 18 – Tygh Valley 10-2 (Saturday)
- October 2 – Mosier 10-2 (Saturday)
- October 29 – Wasco 10-2 (Friday)

**Ag Producers (and small businesses)**
- April 30 – Moro 10-2 (Friday)
- October 27 – Hood River 10-2 (Wednesday)
- October 28 – The Dalles 10-2 (Thursday)
- October 29 – Wasco 10-2 (Friday)

Pre-registration is required for businesses and agricultural producers, contact Stericycle at: 360-772-2838 or John.Pitman@STERICYCLE.com Questions? Call the Tri-County program at 541-506-2636. More information at https://tricountyrecycle.com/resources/upcoming-events/

## COVID-19 Vaccine Information

Just one more reminder to look up vaccine information for your county at this link: https://www.oregon.gov/oha/covid19/Pages/vaccine-information-by-county.aspx After selecting your county you will be able to find links to access where to look to see once your age group or profession is able to get vaccines. Remember that listed dates are the earliest that you can begin to receive vaccines, that doesn’t mean the local health department will have vaccines available on that date.

## COVID-19 Vaccine Webinar for Ag Producers

AgriSafe is putting on a free webinar on February 12th at 10 am: Dispelling Misinformation about the COVID19 Vaccine: What agricultural producers need to know. You can register here: https://us02web.zoom.us/webinar/register/WN_zHeoXaAUTs2YWQoy69ysecw