Grain and Rain
The average price for soft white wheat in Portland for November and December was $6.86 during both months for 10.5% protein. A year ago the price was at $8.97 and $8.62 during November and December. So far the price in January has been at $6.70, a year ago the price was at $8.37. Overall, the price for wheat has been staying very stagnant over the last several months. Barley prices have been holding steady at $200 per ton since the start of December.

The Columbia Basin Agricultural Research Center is in the process of putting in a new weather station at the Sherman Station in Moro and in the interim, they do not have staff collecting rainfall data. However, in the Moro area the rainfall average from rainfall cooperators averaged 1.07 in November, about 70% of the 30 year rainfall average. The Moro area had an average of 1.74 inches in December at 90% of the 30 year average. Average precipitation across Sherman County in November was 1.13 ranging from 1.63 in Rufus to 0.84 near Kent. Average precipitation in December was 1.90 ranging from 2.69 in Rufus to 1.48 in Grass Valley.

Precipitation at The Dalles Airport for November and December was 1.87 and 3.18 inches at 95% and 119% of average. So far in January the airport has gotten 1.19 inches. Crop year total there is at 101% of average at 7.79 inches since September. Average precipitation across Wasco County in November was 1.53 ranging from 2.72 in Mosier to 0.73 near Dufur. Average precipitation in December was 2.83 ranging from 4.95 in Mosier to 1.66 at Juniper Flat.

Climate Outlook
October through December precipitation across most of the Mid Columbia region averaged 100-110% of normal with temperatures 1 to 3°F above normal across the region. January precipitation has been about 170-200% of average so far with temperatures averaging 10-13°F below normal. Despite recent increases in rainfall both Wasco and Sherman Counties have areas of drought. The southern two thirds of Sherman and Wasco Counties are still in D2 Severe Drought with the northern third in D1 Moderate Drought. 67% of Sherman County is in Severe Drought, while 52% of Wasco County is in Severe Drought.

Over the next three months there is a 50-60% chance for above average temperatures and a 50-33-40% chance for below average precipitation across the Mid Columbia. There was some speculation that El Nino would shift into La Nina conditions later this spring, but NOAA’s Climate Prediction Center now expects El Nino to continue and turn neutral in the spring, which supports the three month outlook mentioned above. Other than the recent plunge of artic air...
Climate Outlook Continued...
this means that storms will generally weaken across the inland west and temperatures are likely to be mild, but don’t rule out another polar vortex happening again. According to the Oregon Climate Forecast the next three months are roughly forecasted to have precipitation at 82% of normal with temperatures 1°F above average for the North Central Region of Oregon (Hood River, Wasco, Sherman, Gilliam, Morrow, and Umatilla Counties). February is forecasted to have temperatures 3.5°F above average and precipitation at 87% of average. The forecast for March is for temperatures to be average with precipitation at 76% of average. April is forecasted to have temperatures 0.5°F below average and precipitation at 85% of average. This data is meant to indicate the general expected trend, but other climate drivers can dramatically and quickly change the trend.

Snowpack Outlook
Snowpack in Oregon had a decent start that was washed away by the atmospheric river event in December. However, in just over ten days the blizzards of mid January have dramatically increased snowpack (the figures below indicate snowpack on January 1st before the blizzard came). For the Hood, Sandy, and Lower Deschutes Basin the snowpack was at 33% of median in early January – but this does not include the recent snowfall. On January 1st basin snowpack was at only 17% of median! But at 115% for basin monthly precipitation of median due to rainfall. However, as of January 19th snow water equivalent is up at 109% of average.

Snowpack for the Upper Deschutes Basin was at 107% of normal snow water equivalent as of January 19th. On January 1st basin snowpack was at only 33% of median, but at 95% for basin monthly precipitation of median due to rainfall. However, as of January 19th snow water equivalent is up at 104% of average.

Wheat Market Outlook
USDA recently released their winter wheat seeded area and it was lower than anticipated. Total winter wheat planted area is down 6% from last year, but up 3% from 2022. White winter wheat acres are at 3.5 million acres, which is down 5% from 2023. Under usual circumstances this would have moved wheat prices, but unfortunately due to the continued bearish trends of the grain market in the U.S. it was not enough to cause an upward lift. The price of wheat is unlikely to change until a large enough push from a weather or global event comes along (similar to our recent winter weather all or nothing).

The continued and unrelenting strong U.S. Dollar continues to deter trade as global buyers have to spend more money to get what they could for less from other countries. At the end of last week the dollar index was up 0.8%. USDA trade commitments to date are at 82% of expected exports. The export pace seems to be moving slowly, though last week commercial sales reported for delivery where higher than anticipated.

Europe recently experienced freezing temperatures, but had limited impact on crops as soils were saturated from recent heavy rains that minimized freeze damage. However, water damage and delayed planting dates are expected to lower area planted by 7% from last year. France is anticipated to have the lowest planted area
Wheat Market Outlook Continued...

since 2000 due damage from heavy rains. Exports of wheat out of the European Union are 16% below last year.

Export shipping costs may increase as ships have been avoiding the Suez Canal due to ongoing attacks by Houthi pirates. In mid January shipments through the canal had declined by 40%. Ships are taking the long way around the Cape of Good Hope in southern Africa to avoid being attacked.

The January update from the World Agricultural Supply and Demand Estimates (WASDE) indicated that global wheat production increased by 1.9 MMT with increased estimates for production in Ukraine and Russia. At the same time consumption increased by 1.8 MMT. Exports are estimated to increase by 2.35 MT with increased exports out of Russia, Ukraine, Australia, and Canada. Ending stocks decreased slightly in the United States from the previous report (though still up 8% from a year ago), while world wheat stocks increased by 1.8 MMT. There is still a surprisingly high amount of on farm and off farm wheat stocks for soft white wheat, an indication of just how low and flat lined the markets have been.

Wheat Conditions

Seeded winter wheat conditions across the United States were the best they have been since 2019 going into December before the cold snap. Recent cold temperatures have negatively impacted wheat in the Central U.S. that were not snow covered during extreme cold. Snow coverage in the Northern Plains and here in the PNW have helped mitigate impacts, but still unknown what the damage is. Wait and see what the rest of winter brings in terms of snow coverage and temperatures.

Stripe Rust Outlook for 2024

Xianming Chen at WSU released his first forecast for stripe rust in 2024. As you would expect, warm and wet weather creates a welcoming environment for rust to overwinter. Stripe rust in the 2024 wheat growing season is predicted to be in the range of severe epidemic level (40-60% yield loss on susceptible varieties). Using weather data in November and December he expects to see yield loss of highly susceptible winter wheat varieties to range from 29% to 54%, averaging 42%. Susceptible varieties are expected to have yield losses from 0% to 27%. He suggests that fields grown with moderately susceptible (MS, ratings 6 and 7) or susceptible (S, ratings 8 and 9) winter wheat varieties may need the early fungicide application at the time of herbicide application. The snow cover helped insulate the wheat during the recent cold snap, but also allows the rust to keep going. Usually bad rust years coincide with above average crop yields for areas that rust does not take off (where resistant wheat varieties are used or effective fungicide treatment).

Keep an eye on CoAxium varieties that have not yet been through a severe stripe rust year. Some CoAxium varieties are believed to have more resistance levels than other CoAxium varieties, but still much is unknown. Christina Hagerty, OSU Cereal Pathologist, suggests that producers with CoAxium wheat should just go ahead and plan on applying propiconazole fungicide during spring herbicide application.

It could also be a bad year for Magic and VooDoo. If you have Magic or VooDoo planted be extra vigilant and be ready to spray this spring. Fungicide costs are currently increasing due to supply change issues, but this might not be the year to skimp on at least applying basic propiconazole fungicide.

If your planting spring wheat both Ryan and Seahawk provide some resistance. Ryan is moderately resistant, while Seahawk is considered resistant.

Fertilizer Trends

Fertilizer prices are not declining as rapidly as they have been, but lower prices are still being reported.

- Anhydrous is down 39% from a year ago and down 7% from a month ago at $789/ton or $0.48/lb. of N.
- Urea was down 28% from a year ago and slightly lower than a month ago at $534/ton or $0.58/lb. of N.
- UAN28 was lower by 41% from a year ago and slightly lower than a month ago at $336/ton or $0.60/lb of N.
Fertilizer Trends Continued...
- UAN32 was down 41% from a year ago and slightly lower from a month ago at $394/ton or $0.62/lb of N.
- Potash is lower by 32% from a year ago and slightly less expensive from last month with an average price of $513/ton.
- DAP was lower by 17% from last year and slightly higher from last month with an average price of $725/ton.

Cattle Markets
Cattle prices have been declining over the last few months after record highs reached nationally in September 2023 with prices staying consistently around $170/cwt (was at $180/cwt in September). However, cattle future prices are working their way back up slowly with continued lows and highs. Cattle on feed reported on December 1st was a 3% increase over a year ago and reached the highest level it has since May 2022 at 12 million head. Cattle markets lowered in December due to mixed readings on the large number of cattle on feed, but with feedlot placements and cattle marketing numbers down. Demand is typically lower over the winter and prices may come back stronger again later this spring, but unclear if it will bounce back to where it was.

For the week ending January 13th national live steer prices are at $173.95/cwt - unchanged from a week ago, but still up $17.17/cwt from a year ago. Dressed steer prices are at $273.23/cwt down $1.55/cwt from a week ago, but still up $22.12/cwt from a year ago. Choice beef cutout prices are at $283.44/cwt, up $4.58/cwt from a week ago and up $2.34/cwt from a year ago.

Local cattle prices out of the Toppenish Livestock Auction for December were averaging $118.40/cwt for bulls, $90.92/cwt for cows, $240.58/cwt for heifers, and $202.63/cwt for steers. Cow-calf pairs were averaging $2,750 per pair, bred cows at $1,763.14 per head, and bred heifers at $1,665.21 per head. Prices noticeably declined in January averaging $116.37/cwt for bulls, $102.54/cwt for cows, $163.06/cwt for heifers, and $179.42/cwt for steers. Steer weights averaged 650 to 800 lbs, while cows were at 1,350 to 1,450 lbs.

Cattle slaughter numbers are lower due to recent weather disruptions to power and transportation. For the week ending January 13th the numbers were down by 112,000 head at 83% of this time a year ago. These numbers are expected lower for the last few weeks as well. Beef production was also down by 80.1 million lbs from a year ago with the week ending on January 13th, due to plant disruptions from weather and the holidays. Similarly, cold temperatures and snow accumulation are expected to lower cattle carcass weights. Once all this snow melts across the west feedlots are expected to be muddier and will also negatively impact carcass weight and undressed steer prices. A new carcass weight record was reached in December as most of the U.S. encountered mild weather conditions. In January carcass weights were up 19 lbs from a year ago at 1,406 lbs.

Similar to slow grain exports, cattle exports are also noticeably lower than a year ago, likely influenced by the strong US dollar encouraging imports to look elsewhere for less expensive beef. Beef exports were 241.5 million pounds for the month of December, down 20.5% from last year. Over the last ten months beef exports have been down 14.9% from the same period last year. Compared to a year ago, South Korea exports are down by 17.7%, Japan lower by 21.3%, China down by 22.6%, and Mexico 13.7%.
Hay and Pasture Outlook

Pasture and range condition in Oregon should look improved this spring with all the rainfall and snow coverage, NASS won’t do another update till April on national pasture and range conditions. Hay stocks in Oregon are down 15% from a year ago. Washington hay stocks are up 25%, likely due to decreased exports overseas in the past year. Idaho hay is up 2%. The U.S. total is up 6.9%. Looking at individual hay classes Alfalfa seems to be lower in the west and Northeastern states, though is at 2.2% across the U.S. Alfalfa hay stocks are down 2% in Oregon, 1% in Idaho, and up 2% in Washington.

Hay prices continue to decrease from record highs reached over the last few years. Pricing off the Oregon Direct Hay report (accessed here: https://beav.es/iTs) for the central Oregon region (Crook/Deschutes/Jefferson/Wasco Counties) showed the following trends:

For November premium quality alfalfa was selling for $370/ton, while good quality was at $190/ton. In December prices for alfalfa were averaging around $280/ton for fair quality and $360/ton for premium. So far in January prices are staying similar to December with premium quality alfalfa around $360/ton, while good quality is around $200/ton.

Mixed grass hay with premium quality was selling for around $485/ton during November. In December prices were around $398/ton for premium quality.

Orchard grass premium hay was selling for around $355/ton in November while in December prices were $359/ton for good quality and $366 for premium. So far this month prices are around $352/ton for premium quality and $250/ton for good quality.

Triticale premium hay was selling for around $220/ton in December and $220/ton in October for good quality. So far in November the price has been at $220/ton for good quality.

NRCS Conservation Stewardship Program: Online Info Session for Farmers & Ranchers, Wednesday, February 7 from 2pm - 3pm.
NRCS funding supports on-farm practices such as compost and mulch applications, planting hedgerows, cover cropping, prescribed grazing and more. There are new eligible practices and more money than ever is available in 2024 for the USDA NRCS Conservation Stewardship Program (CSP) cost share program. Register here for the online info session here: https://beav.es/qjW

Listening session for wheat producers to bring research needs to researchers, February 9th, 2024
How have you contributed to the future of dryland wheat lately? Do you have a wheat production question or concern that you would like to see more research completed on? Join OSU, WSU, and ARS dryland wheat researchers on Friday, February 9th at the Tamastslikt Cultural Institute in Pendleton, Oregon where they will be hosting a round table discussion designated to bring dryland producers together to share what they see as their biggest risks over the next few years and into the next decade. Coffee, continental breakfast and lunch will be provided. By attending and contributing to the discussion you will be directly impacting the future of the wheat industry. Questions or to RSVP: Debbie.Sutor@OregonState.edu or 541.215.8905

Farm First Aid Training, February 21, The Dalles, 12:30 pm to 5 pm
First aid training for farm owners and farm workers, including CPR and severe trauma. Cost is $20 paid at the door, class will be held at CGCC, Building 2, 3rd floor lecture hall, The Dalles (400 E Scenic Drive). RSVP by emailing jacob.powell@oregonstate.edu or call 541-298-3581.

Get Ready for Spring Pesticide Training, February 28th, The Dalles, 1:30 pm to 4:30 pm
Pesticide training with a focus on spring weed control for fallow, wheat, and forage production systems. 3 ODA pesticide credits anticipated (2 of the 3 will be CORE credits). Cost is $20 paid at the door, CGCC, Building 2, 3rd floor lecture hall, The Dalles (400 E Scenic Drive). RSVP by emailing jacob.powell@oregonstate.edu or call 541-298-3581.
2024 Wasco County NRCS Local Work Group Meeting, Thursday, February 29th 10am-12pm, Dufur Parish Hall
This meeting is an opportunity to review NRCS accomplishments from 2023 and receive input for the future of NRCS funds in Wasco County. Farmers, ranchers, forestland owners, as well as partner agencies and organizations are all invited to the table and encouraged to bring your ideas and concerns surrounding natural resources in the county. The NRCS is expected to receive $19.5 billion from the Inflation Reduction act over the next few years and I would love to come up with creative ways to bring some of those dollars to Wasco County! The funds we receive go to you, the agricultural producers and private land managers, so this meeting is a great opportunity to shape where and how we get these funds on the ground.

If you are unable to attend the meeting, but would still like to provide us some feedback, please complete this short survey and we will incorporate your ideas into our future planning! [https://beav.es/qjh](https://beav.es/qjh)

Oregon Community Food Systems Network’s Farmer & Rancher Disaster Resilience Grant Program is now accepting applications through March 1, 2024! This program will support Oregon’s small producers to be more resilient to climate disasters. The program prioritizes funding that benefits historically underserved farmers and ranchers. See the attached one pager for more information. Details and grant materials can be found here: [https://beav.es/qjs](https://beav.es/qjs)

Considerations for using Biological Fertilizers in Dryland Wheat in Oregon, Webinar, March 1, 12:30 pm to 1:30 pm
Are you considering using biological products to help supply nutrients to your crop? Join me as I provide an overview from research trials I completed in winter and spring wheat in Moro and Pendleton last year and the lessons learned from using Envita and Fresh Tracks Universal Microbes. I will also discuss return on investment and additional application considerations, along with other biological products to avoid or consider. Registration is required here: [https://beav.es/qi7](https://beav.es/qi7)

National Cover Crop Summit, online, March 12th through 14th
The National Cover Crop Summit returns March 12 -14, 2024, with another lineup of successful cover crop farmers, researchers and agronomists sharing their best seeding strategies, grazing and feeding tips, variety selection secrets and more. The virtual summit is free, though you can also pay for access to additional acres. Sign up and learn more here: [https://beav.es/qje](https://beav.es/qje)

Central Oregon Forage Seminar, Tuesday, February 20th, 8:00 A.M. to 3:30 P.M.
Join Central Oregon Hay Growers’ Association and OSU Extension – Crook County for the Central Oregon Forage Seminar. There will be three ODA pesticide credits available and a lunch provided by the Central Oregon Hay Growers’ Association and sponsors.

The Seminar is free to attend and registration is not required, it is taking place at the 4-H Clover Building, 502 SE Lynn Blvd Prineville, OR 97754. Learn More: [https://beav.es/quL](https://beav.es/quL) or scan QR:
The Oregon Wheat Commission will host its annual Grower Workshop February 27-28, 2024. The workshop features a variety of tours, including the Wheat Marketing Center, Shaver Transportation, a wheat foods manufacturing facility, and a local grain export facility. Participants are provided updates on OSU wheat research, highlights from U.S. Wheat Associates and more. The workshop provides an opportunity for growers to see firsthand the shipping, grading, product development and customer relations including topics like Supply & Demand, transportation issues, Sanitary/Phyto-Sanitary issues and global conditions affecting the price of wheat.

North Central Livestock Association Spring Showcase, March 23, 1 pm, Sherman County Fairgrounds
NCLA is excited to invite you to their spring showcase at the new Sherman County Fair Indoor Facility. There will be speakers, merchandise, booths, food, and live music. Tickets are $30 for all you can eat taco bar, kids under 7 eat for free. Interested in being a sponsor? email nclivestockassoc@gmail.com

Biofertilizers: Fertilizer substitute or snake oil?
Last year I completed several different trials looking at foliar applications of the nitrogen fixing biofertilizer Envita and another biofertilizer product, Fresh Tracks Universal Microbes (FT). I have reported on results previously, but wanted to share return on investment information after crunching the numbers for the trials I completed in Sherman County. Our results were not as consistent as I would have liked, but we did see an effect of using these products that suggests most biologicals are not snake oil, but they might not always do exactly what you want or expect. For example, Envita significantly increased nitrogen uptake in spring wheat in Moro, but it was not converted into yield. More years of data are also needed to truly understand if these products are economically viable or not. The winter wheat trial on Gordon Ridge found that yield was consistently increased by 1.1 bushels where Envita was applied compared to Fresh Tracks and control treatments at the same fertilizer rate. Unfortunately, the price of wheat at $7.18 and yield increase was not enough to generate a return on investment compared to the control due to the $14 cost of the Envita, the ROI with Envita came out just $1 below the control. Fresh Tracks yielded the same as the control, but cost $12, so no positive ROI.

At the Sherman Experiment Station we varied the nitrogen rates at 0 lbs of nitrogen, 45 lbs, and 60 lbs in winter wheat shown in the table to the right. ROI was calculated for each treatment. By reducing our fertilizer rate and still maintaining or increasing yield it generated additional revenue. Envita gave us an 11 bushel advantage over the control, while FT was lower (partially due to mechanical issues whiles seeding those plots with FT microbes).

With spring wheat in Moro we found the greatest ROI was achieved by not applying any fertilizer (70 lbs residual nitrogen was available) and adding FT. Using FT we still had a yield of 40 bushels and greatly reduced input costs. I am not suggesting that we can stop applying fertilizer all together, but if your soil residual nitrogen is high enough you could get by with skipping a few years and apply biofertilizers to do a better job accessing those nutrients. Just food for thought here. If you want to know more check out the webinar I am having on March 1st and discussed on page 6 of this newsletter.

Source Biofertilizer Trial Results
Source is a biological product produced by Sound Ag that is classified as a microbiome activator to get more nitrogen and phosphorus from the soil. Essentially, it is a foliar spray that activates additional microbes in the soil that can improve nutrient efficiency and availability to the crop. It is not yet labeled for use in wheat, but that is why they are looking for additional producers willing to host a trial. One trial was completed in winter
Source Biofertilizer Trial Results Continued...
soft white winter wheat last year in Wasco County outside of The Dalles. They found that yields were increased by 2.8 bushels per acre with a return on investment of $5.94 per acre compared to untreated controls at the same nitrogen level (85 lbs of total available nitrogen). The control yielded 58.7, while where Source was applied the yield was 61.5 bu/acre. If you're interested in working with Sound to do a trial on your farm contact their senior agronomist Jessica Pupo by email: J.Schultz@Sound.ag or call her at 303-258-6514.

Another trial completed by McGregor in Colfax found that Source increased yield of the spring wheat variety Ryan over just applying UAN alone at flag leaf. Where Source was applied along with Rally (McGregor’s urea-based foliar blend of potassium, magnesium, nitrogen, and chloride) the spring wheat yielded 39 bushels, 2 bushels above applying Rally alone, and 8 bushels above top dressing with just UAN applied. Remember these results are from just one year at one location, but some of these results are promising.

Ready to Scale Your Meat Business? Limited Space Available for Producer Business Accelerator
If you are ready to scale your meat business, enter new and larger distribution channels you’ll need to “level up” your financial systems and your marketing to improve your profit potential.

The Niche Meat Processor Assistance Network (NMPAN), the Good Meat Project and Kitchen Table Consultants have partnered to help you navigate the leap.

Together these organizations present the Western Meat School Business Accelerator, a 7 month, peer-to-peer learning experience for farmers, ranchers and meat brands that are scaling their production and sales with the intent to reach multi-million dollar goals while producing high quality local and regional meat products.

SPACE IS VERY LIMITED and the Application Deadline is February 2, 2024. Give your business the gift of expansion and level up. Learn more here: https://beav.es/qjB