**Grain and Rain**

The average price for soft white wheat in Portland for January, February, and March was $6.63, $6.36, and $5.63 per bushel for 10.5% protein. A year ago the price was at $8.36, $8.44, and $7.78 during January, February, and March. So far the price in April has been at around $5.71 per bushel, a year ago the price was at $7.60 per bushel. Barley prices for January, February, and March were $200, $190, and $175 per ton. So far in April prices have been around $175/ton.

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. Average precipitation across Sherman County in January was 2.80 inches ranging from 1.57 east of Grass Valley to 4.07 south of Grass Valley. Average precipitation in February was 0.99 ranging from 0.53 in Wasco to 1.58 south of Grass Valley in Moro. Average precipitation across Sherman County in March was 0.77 ranging from 0.45 east of Wasco to 0.96 west of Wasco. Average total precipitation across Sherman County is at 9.40 for the crop year.

Precipitation at The Dalles Airport for January, February, and March was 3.01, 0.98, and 1.14 inches at 125%, 62%, and 100% of average. Crop year total is at 105% of average with 11.73 inches since September. Average precipitation across Wasco County in January was 3.78 ranging from 2.35 in The Dalles to 6.84 in Mosier. Average precipitation in February was 2.23 ranging from 1.16 in the Columbia District east of The Dalles to 4.55 at Crow Creek Reservoir. Average precipitation in March was 1.93 (rainfall for several locations has not yet been reported though) ranging from 0.69 in the Columbia District east of The Dalles to 1.93 at Crow Creek Reservoir.

**Climate Outlook**

Rainfall over the last three months has been 150-170% of average for the Mid Columbia Region. Temperatures have been at about average for the past three months in the Mid Columbia Region, though have been 1-5°F above average in other parts of Oregon. Both Wasco and Sherman counties have improved on the drought monitor. Currently all of Sherman County is ranked as abnormally dry (D0) on the drought monitor, which is an improvement from 100% ranked as being in moderate drought or drier three months ago. Most of Wasco County is rated as abnormally dry, with the exception of 7% of the county along the western edge that is not experiencing any dryness. Three months ago 96% of the county was ranked as being in drought.

El Nino is leaving with trade winds gaining speed. The forecast is for La Nina conditions to develop later this spring and summer, but will likely not change climate outlook for the Mid Columbia Region. In past years where transition into La Nina has occurred during the summer parts of Western Washington tend to be drier than average from June through August, but no other clear trends for the PNW. Generally such a transition makes the Mid West and East Coast warmer and wetter. Over the next three months through May there is a 33-40% chance for below average precipitation and a 50-60% chance for above average temperatures.
Climate Outlook Continued...
The state climate office is forecasting the following conditions for the North Central Region of Oregon (Hood River, Wasco, Sherman, Gilliam, Morrow, and Umatilla Counties):
- April: Temperatures 0.5°F below average with rainfall at 85% of average
- May: Temperatures 2.8°F above average with rainfall at 66% of average
- June: Temperatures 1.1°F above average with rainfall at 69% of average

Snowpack Outlook
Snowpack in Oregon is overall at average levels, though deficits do exist in some areas, primarily in North Eastern Oregon. Considering an El Nino winter conditions were fortunately wetter than expected. Snowpack in basins feeding the Mid Columbia Region are slightly below average.

For the Hood, Sandy, and Lower Deschutes Basin the snowpack was at 91% of median on April 1st and at 96% of median on March 1st. Precipitation was at 84% of median for March and at 101% since October 1st.

Snowpack for the Upper Deschutes Basin was at 102% of the median snow water equivalent as of April 1st, a decline of only 1% from being at 103% of median in March. Precipitation was at 100% of median for March and at 108% since October 1st.

New AgriMet Weather Stations up and running
Recently new AgriMet weather stations were installed across North Central Oregon thanks to funding from OSU Extension and Oregon Water Resources Division. A total of 30 new AgriMet weather stations have been installed across Oregon thanks to these funds. Jama Hamel AgriMet Program Coordinator with the Bureau of Reclamation installed the weather stations. Thanks to the private landowners that have agreed to host these weather stations! Data from these stations can be accessed online 24/7. See the links on the next page for different local stations or explore on the Agrimet’s website: https://www.usbr.gov/pn/agrimet/
AgriMet Weather data can be accessed at these links for each site.

- Dufur: [https://beav.es/c2b](https://beav.es/c2b)
- Rufus: [https://beav.es/c2u](https://beav.es/c2u)
- Boardman: [https://beav.es/c26](https://beav.es/c26)
- Condon: [https://beav.es/c2L](https://beav.es/c2L)

### Wheat Market Outlook

The price for wheat continues to decline due to several factors, including low exports and heavy competition on the global market. USDA Grains Stocks Report shows wheat stocks at 29.6 MMT across the U.S., up 16% from the year prior and likely influenced by farmers not selling with low prices. The U.S. Dollar Index has been up 3% so far in 2024, but recently has been weakening, which has been improving futures. However, slow exports and promising crop conditions are keeping a damper on price response. Wheat exports for all classes are 84% of last years pace with commitments to date at 97% of total projected exports. In March China cancelled a large order they had placed for wheat from both the U.S. and Australia that negatively impacted futures. One sign of slow export rates is that the Baltic Dry Index is currently the lowest it has been in the last seven weeks. The Baltic Dry assesses the average cost of shipping raw materials such as grain.

Cheap Russian wheat has been flooding the markets and is one reason why the price continues to drop. However, recently Russian wheat has increased in price by 5% and demand seems to be lowering for it with some alleged claims of quality issues and government imposed restrictions. Russia’s top exporting company is facing export restrictions due to issues with grain quality and phytosanitary requirements. At the end of March Russia blocked 15 ships from being processed, holding back 400,000 metric tons from being shipped. Russia and other areas of the Black Sea have been staying significantly hotter and drier than normal. Perhaps some promising news that may increase wheat prices in the short term.

The International Grains Council has put global wheat production at 799 million metric tons (up 1% from last year) thanks to promising crop conditions in the northern hemisphere. Despite this increase a 2% decrease in world ending stocks is still anticipated.

Wet weather is being forecasted for Canada and western Europe, especially France and Germany. Canada needs topsoil moisture improvement desperately, which forecasted snow and rain will help. Temperatures in Canada will also likely drop below average, but damaging frosts are not expected. Rainfall in Australia has been following two extremes in wheat producing regions with western Australia having their third wettest month since 1900 while rainfall in southern Australia has been below average.

### Wheat Conditions

As of March 28th USDA forecasted all wheat planted area is down 4% from 2023, but 500,000 acres higher than expected. Winter wheat acreage is estimated at 34.1 million acres, down 1% from the previous estimates. Dry weather has continued across the U.S. Central and Southern Plains, but overall the wheat crop is looking strong. As of March 31st, 4% of winter wheat was headed in the Southern Plains. In the Northern Plains cold temperatures have been lingering. The first USDA Crop Progress report of 2024 rated 56% of the winter wheat crop in good to excellent condition, up 28% from a year ago.

So far Oregon winter wheat is looking similar to Idaho and better than Washington due to colder conditions and lack of snow during cold events. **The Oregon winter wheat crop as of April 7th is ranked as 2% very poor, 4% poor, 21% fair, 64% good, and 9% excellent.** Washington winter wheat is ranked as 3% very poor, 7% poor, 46% fair, 40% good, and 4% excellent. Idaho winter wheat is ranked as 0% very poor, 7% poor, 30% fair, 62% good, and 1% excellent.

Across the 18 wheat producing states that are reported winter wheat is ranked as 4% very poor, 8% poor, 32% fair, 48% good, and 4% excellent. A week ago the crop was ranked as 4% very poor, 7% poor, 33% fair, 49% good, and 7% excellent. Overall conditions are better than a year ago when winter wheat was ranked only 27% good to excellent.
Stripe Rust Update for 2024
Stripe rust in the 2024 wheat growing season was predicted to be in the range of severe epidemic level for Oregon and Washington (40-60% yield loss on susceptible varieties). In Washington stripe rust overwintered well and was found early. However, in Oregon stripe rust risk has been lowered as rust was not found until March 13th by Chris Mundt in one experimental plot of a disease screening trial in Corvallis that was planted about a month earlier than normal. During typical years with severe epidemics for stripe rust, it is easy to find rust in the first few days of February in Corvallis. The OSU Cereal Pathology Program believes that rust severity is lower than expected in Oregon due to drought conditions during two of the three previous years reducing stripe rust severity and the amount of inoculum to overwinter. However, stripe rust was just found for the first time this year in eastern Oregon in early April.

The text below is from a letter recently sent out to growers by Chis Mundt and Christina Hagerty:

On April 10th stripe rust was found in the OSU Cereal Pathology’s rust nursery at the Columbia Basin Agricultural Research Center in Pendleton on a highly stripe rust susceptible experimental cultivar.

Growers should scout fields, particularly if known susceptible cultivars (e.g., LCS Dagger AX, UI Magic CL+) are planted. CoAxium cultivars are based on stripe rust susceptible backgrounds and some newer releases have unknown stripe rust susceptibility. Thus, CoAxium cultivars should be monitored very closely.

If stripe rust is found, a fungicide application is recommended. Conditions for stripe rust have been favorable in eastern Oregon.

Rust can increase very quickly and it is important to not let stripe rust build to high levels. For highly susceptible varieties, it is best to spray when rust is first found, rather than wait for flag leaf emergence. Timing of a fungicide application is generally more important than the fungicide product applied.

Less expensive fungicide products (triazoles) should give adequate control if applied in a timely manner. Fungicides containing both a triazole and a strobilurin can sometimes give better and more prolonged control under severe rust conditions, but are more expensive. We do not have data to support that SDHI fungicides give better control on stripe rust than a triazole/strobilurin mix. Choice of product will thus depend on susceptibility of your variety, yield potential of your crop, chemical price, and available funds. Please do not hesitate to reach out if you have questions or concerns.

-Christina Hagerty, Chris Mundt

Stripe Rust Resistance Ratings
Stripe rust resistance ratings for winter wheat varieties can be found in the OSU Disease Summaries and the WSU Variety Characteristics tables, while resistance ratings for spring wheat varieties can only be found in the WSU Variety Characteristics tables (links below). Remember higher numbers for stripe rust ratings indicate increasing susceptibility with moderate (5), moderately susceptible (6, 7) susceptible (8, 9) stripe rust ratings indicating varieties to keep a close eye on.

- OSU Disease Summaries: https://beav.es/TPk
- WSU Variety Summaries: https://beav.es/c6o

Ratings for common winter wheat varieties:
- Appleby: moderate resistance
- Artdeco: 5, moderate resistance
- Assure: rating of 1, resistant
- Jefe: resistant
- Magic: rating of 8, susceptible
- Presto: rating of 1, resistant
- Rosalyn: resistant
- Shine: rating of 1, resistant
Stipe Rust Ratings Continued...

VooDoo is a winter wheat variety that is planted on a lot of acreage in Oregon this year. When it was first released by Limagrain it was given a moderate resistant rating for stripe rust and was marketed as a similar yielder to Magic, but with improved stripe rust resistance. However, Limagrain recently increased VooDoo’s susceptibility to stripe rust with more years of disease data available (moved from a 5 up to an 8). WSU trials have found that it is susceptible to stripe rust, while OSU trials suggest it is not. Limagrain believes this may be a result of the variety having higher resistance to rust earlier on than as an adult. In Oregon stripe rust pressure occurs earlier in the growing season than for most of Washington. As a result, VooDoo weathers stripe rust better in Oregon with early rust resistance, while it’s later adult stripe rust resistance is not as high and is more susceptible to rust in Washington. Either way – VooDoo should be treated like any other variety and scouted for rust and other diseases and fungicide applied if rust is found.

Fertilizer Trends

Fertilizer prices have been increasing over the last few months with urea and UAN28 showing the greatest increases.

- Anhydrous is up slightly from a month ago at $794/ton or $0.48/lb. of N.
- Urea is up 8% from a month ago at $576/ton or $0.63/lb. of N.
- UAN28 is up by 5% from a month ago and slightly lower than a month ago at $360/ton or $0.64/lb of N.
- Potash is up slightly from a month ago with an average price of $513/ton.
- DAP is up slightly from a month ago with an average price of $779/ton.

The Port of Baltimore where the Francis Scott Key Bridge collapsed handles 10% of UAN imports into the United States. The bridge collapse may lead to temporary UAN shortages and price increases. Fortunately, UAN is the main nutrient imported through the harbor and other shortages of fertilizers are not expected. The Port of Baltimore also handles a lot of farm equipment imports so may impact parts and machinery availability and prices in some areas of the United States.

Beware of Biochar with Pre-emergent Herbicides

Biochar is a stable form of carbon that is made from organic waste material that is partially combusted in the presence of limited oxygen. Biochar qualities vary greatly with the material or feedstock that it comes from (i.e., timber slash, corn stalks, manure, etc.). Biochar has been found as a way to increase soil pH, water holding capacity and soil organic matter, and other benefits to soil and wheat production. However, material and transportation costs continue to be a barrier.

Recent research has found that pre-emergent herbicides lose their efficacy on controlling weeds when biochar is applied, so something to think about before using biochar in your fields. University of Florida researchers found that biochar applied at a rate of 2 tons per acre was enough to reduce herbicide efficacy of atrazine and pendimethalin. Doubling the rate of the herbicides used did not improve weed control where biochar was applied. While most wheat producers do not use the same pre-emergent herbicides used in this study, Anthem Flex (pyroxasulfone and carfentrazone-ethyl) and Zidua (pyroxasulfone), would respond similarly to biochar.

Bulletins Two Live

Bulletins what? Bulletins are an online extension of the pesticide label that certain labels may make you refer to and fill out. These online bulletins are currently a requirement for certain pesticide labels and will become a requirement for ALL pesticide labels in the future.

Why is this change happening? The EPA is in trouble for not following requirements in the Endangered Species Act when registering pesticide products. Several different groups have brought lawsuits against EPA, referred to as the “Mega-suit”. As a result, EPA is having to re-register every pesticide and make corrections on the label to meet the Endangered Species Act. EPA is adding a bulletin requirement to every re-registered product label to meet requirements.

What does this mean to you the applicator? It means you need to read the label and see if the label directs you to obtain a Bulletin. If you need a Bulletin it should be listed in the ENVIRONMENTAL HAZARDS section of the label under Endangered Species Protection Requirements. If the label says you need one go to https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins - DO NOT go to http://www.epa.gov/espp/ as the link does not work – even though that is what is used on several labels currently. So far for wheat producers there aren’t many products making you do this yet…but read the label and check, more and more products will require it.
Here is an example of what a label might say:

Endangered Species Protection Requirements: This product may have effects on federally listed threatened or endangered plant species or their critical habitat. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county or parish in which you are applying the pesticide. To determine whether your county or parish has a Bulletin, and to obtain that Bulletin, consult “http://www.epa.gov/assp”, or call 1-800-447-3813 no more than 6 months before using this product. Applicants must use Bulletins that are in effect in the month in which the pesticide will be applied. New Bulletins will generally be available from the above sources 6 months prior to their effective dates.

What is the Bulletin Two Live? Once you go online you will have to first focus the map on the area you plan on spraying by entering in the location and / or zooming in on the map (see map image below). Enter the month of application – unfortunately the way it is currently set up you must use a separate bulletin for each month you are applying a product. You can fill out the bulletin for applications planned within the next 6 months. Next enter in the EPA pesticide registration number (EPA Reg. No. 000-0000) on the label (this is on the front page of the label).

You will see Pesticide Use Limitation Areas (PULAs) indicated in pink on the map – these are areas where pesticide use may be limited during certain months and weather conditions. Most PULAs follow streams for the primary endangered species in the west – salmon. Once all your information is entered you will see a “Printable Bulletin” in the upper left. This button will be red – click on the pink PULA and the light will turn to green and you can select it. This then gives you a bulletin you can print or save to your computer in the “cloud” with google drive or similar program. The bulletin will outline if there are any additional considerations that should be taken when applying the product. Most products used in wheat shouldn’t have many additional requirements unless you are right next to the PULA.

You can also do a blanket approach – remove any registration numbers and just click on the pink PULA – it will generate a list of all pesticides that a bulletin is currently needed for. You can cover yourself this way, it’s not ideal with the number of pages it generates, but does meet the requirements.

Who is checking that you do this? ODA is not spot checking anyone at this time and the focus is on education and not enforcement. At some point this could change to stricter enforcement, so the best strategy is to start using it now. EPA is getting a lot of feedback already on how they can make these requirements easier for applicators to meet.

The Oregon Wheat Growers League hosted a webinar with Dani Lightle, OSU IR4 Specialty Crops Pesticide Registration Research Leader, on this back in February and you should be able to find a recording of the webinar on their website. There is also a similar talk that was given by Dani that can be found on YouTube here: https://beav.es/e27.
Hay and Pasture Outlook
USDA pasture and range conditions have not yet started for the 2024 grazing season, but the drought monitor shows major grazing regions are looking good for now. Pricing off the Oregon Direct Hay report (accessed here: https://beav.es/iTs) over the last few months has shown steady and lowering prices for hay in the Central Oregon region (Crook/Deschutes/Jefferson/Wasco Counties):

- Alfalfa hay for January through March has been selling for $200/ton for good quality and $360 for premium.
- Orchard grass in January with premium quality was averaging $352.50/ton, while good quality was $250/ton. In February prices declined to $339/ton for premium quality and stayed at $250/ton for good quality. In March prices continued to lower to $362/ton for premium quality orchard grass and so far in April is around $333/ton.
- Triticale with good quality has been selling at around $220/ton over the last several months.
- Mixed grass hay has been holding steady at $485/ton for premium quality.

Cattle Markets
Cattle prices continue to increase, though more substantial increases are currently happening in Montana and the Mid West than here in the Northwest. Out of Billings, Montana 500-600 lb steer calves are selling for $330/cwt, this is up $85/cwt from last year and nearly triple the average from 2018-2022. Heavier calves (700-800 lbs) are at $270/cwt, nearly double the average and up $70/cwt from a year ago. In Washington prices are lower with 500-600 lb steer calves selling for $290/cwt, this is up $40/cwt from last year and $100/cwt above the average though.

The number of heifer replacements reached an all time low in 2023 which is supporting strong markets. Overall prices are set to continue increasing as cattle inventories continue to tighten. Expected cow calf returns in 2024 have increased to $700 per cow, up by over $100 from 2023. Cow Calf producers looking to sell calves, cull cows, or replacement heifers are in a good place to see record profits. In addition, feed prices are expected to continue to lower. After four years of profits being in the red (2017 – 2021) for cow calf producers it is nice to see markets bounce back.

For the week ending April 6th national live steer prices are at $187.04/cwt – down 0.6% from a week ago, but up 8% from a year ago. Dressed steer prices are at $296.88/cwt, down 1% from a week ago, but still up 6.5% from a year ago. Choice beef cutout prices are at $301.10, up 2.6% from a week ago and up 4.4% from a year ago. Cattle slaughter numbers nationally were at 2,421,000 head, up 0.7% from a week ago, and up 2.2% from a year ago.

The Cattle Inventory report shows beef cows in Oregon are up 3,000 from a year ago, but 16,000 down over the last decade. Nationally beef cows are 716,000 lower over the last year and 733,000 lower over the last decade. Total beef calf crop in 2023 was 465,000 in Oregon, 195,000 in Washington, and 25,358,000 nationally. Over the last decade the total beef calf crop has decreased by 38,000 head in Oregon and 290,000 nationally, supporting that herd rebuilding has not yet started.

Will herd rebuilding take place in 2024? Depends on if drought persists in parts of the U.S. and what hay and feed prices continue to do. So far producers aren’t holding pack on heifers, but more heifer retention is needed to see any rebuilding take place. A heifer held back in fall 2024 would not be placing a calf on the market till late 2026 or early 2027. So even once heifer retention increases will be a while to see the results in beef production. Heifer retention will likely cause a temporary tightening of feedlot supplies, which are already getting tight. Feedlot inventories are expected to continue to decline. Feedlots tend to be feeding for longer to get larger weights, which the packers are wanting.

Nematode and Cover Crop Webinar with PNW Farmers’ Network, April 24th
Join the PNW farmers network for this webinar on April 24th at 10 am to listen to Christian Hagerty and Rachael Plunkett from OSU talk about Nematodes and Cover Crops in dryland wheat-based systems. Sign up here to receive the zoom link: https://beav.es/c2X

OWGL Wheat Talk – Disease Updates with Christina Hagerty, May 8th
Oregon Wheat League is hosting another Wheat Talk Webinar on May 8th from noon to 1 pm. Christina Hagerty will provide an update on disease, including rust and soil borne wheat mosaic virus. Go to https://www.owgl.org/events/training for the zoom link.
**Hazardous Waste Collection Events for Ag Producers**
Moro - Hazardous Waste Collection for households, small businesses, and ag producers
- **Friday, April 26,** 10 am - 2 pm
- Sherman County Road Department - 4th & Hood Street, Moro, OR.
- Small businesses and ag producers must pre-register: [https://tricountyrecycle.com/hazardous-waste/business/](https://tricountyrecycle.com/hazardous-waste/business/)

The Dalles - Hazardous Waste Collection for small businesses and ag producers
- **Thursday, October 24,** 10 am - 2 pm
- The Dalles Disposal
- Pre-registration required here: [https://tricountyrecycle.com/hazardous-waste/business/](https://tricountyrecycle.com/hazardous-waste/business/)

**Agricultural 3x Rinsed Chemical Container Recycling Event**
- **Wednesday, May 29,** at The Dalles Disposal from 8 am to noon, open to any Ag Producers in OR or WA
- Containers must be triple rinsed with both caps and pamphlets removed
- RSVP Required by May 14th here: [tricountyrecycle.com/agcontainer](https://tricountyrecycle.com/agcontainer)

**2023 OSU Extension Crop Tours**
**Sherman County Crop Tour, June 4**
Tuesday, June 4th, 8:30 am till noon, starting at the Sherman County Extension Office in Moro (66365 Lonerock Rd, Moro, OR 97039). RSVP appreciated by calling 541-298-3581, emailing jacob.powell@oregonstate.edu, or here: [https://beav.es/ipS](https://beav.es/ipS)

**Wasco County Crop Tour, June 13**
Thursday, June 13th, 8:30 am till noon, starting at the OSU Wheat Variety Trials near Dufur, OR off of Hwy 197 (45.4842, -121.1029, trial this year is next to the orchard and not the cemetery). RSVP appreciated by calling 541-298-3581, emailing jacob.powell@oregonstate.edu, or here: [https://beav.es/cWC](https://beav.es/cWC)

**Experiment Station Field Days**
Field days are free to attend, but you need to register here: [https://beav.es/c2F](https://beav.es/c2F)
- Tuesday, June 11th, Pendleton Station Field Day, starts around 8 am
- Wednesday, June 12th, Sherman Station Field Day, starts around 8 am

**New Producer Grant from AgWest**
This grant opportunity celebrates the ingenuity and passion of new producers and helps them bring dreams to fruition. This program was developed for those who have a vision for their operation but lack the funds to put their plans into action. Successful applicants will receive a one-time $15,000 grant to support their operation’s growth. The application deadline is May 31. [https://beav.es/c6U](https://beav.es/c6U)

**Online and On Demand Wildfire Classes for Ag**
In the past I have put on trainings to help Ag Producers understand and meet OSHA wildfire fighting training for employees suppressing wildfires on agricultural lands in Oregon. Given the new RFPA capacity that has come into the region I am backing off on offering trainings. However, I will happily provide training if requested. I still have two online classes that you can take on demand. One online class focuses on preparedness and on the requirements to help employers, while the other provides the needed training that your employees should take.
- Agricultural Wildfire Behavior and Suppression course covers wildfire suppression tactics and safety specifically for producers and farm employees in eastern Oregon: [https://beav.es/ibX](https://beav.es/ibX)
- Wildfire Preparedness in Agriculture course focuses on defensible space and considerations for reducing ignitions on your property. Also walks through the required plans that employers need to have: [https://beav.es/w92](https://beav.es/w92)

**OSU Wasco County Extension Looking for Paid College Interns**
Do you know of a high school senior enrolled in college this fall or a current college student looking for paid experience this summer? Wasco County Extension is looking for two interns for summer 2024. One intern to assist the General Ag Program with applied wheat research and another for summer 4-H programs. Interns can work up to ten weeks, 40 hours a week, and will be paid $18/hour. Flexibility for hours and weeks worked if students are needed during harvest or fair. Apply by 05/15/2024 at this link: [https://beav.es/c8A](https://beav.es/c8A) Contact me at 541-298-3581 for questions.