WSU Walla Walla County Extension

News

Vol. 2023: No. 1. January-February

Is That Wheat or a Field of Cheatgrass?

Adapted from WSU Wheat & Small Grains, Dr. Ian Burke & Dr. Drew Lyon

What happened? Wheat fields throughout Eastern Washington are full of downy brome (a.k.a cheatgrass). Many of those that aren't, are full of Italian ryegrass. Why didn't herbicides perform better than they did this year? Was it the weather, late applications, or are herbicide-resistant weed biotypes more prevalent than before? We would like to know the answer.

Herbicide Resistant Weeds Map: https://bit.ly/3VuxoPc

WSU Herbicide Resistance Testing Program: https://bit.ly/3G1mv1z

WSU Herbicide Resistance Resources Page: https://bit.ly/3WtEq8g

WSU Wheat & Small Grains Website: https://smallgrains.wsu.edu/

Dr. Ian Burke, with partial support from the Washington Grain Commission, has been screening weeds like downy brome and Italian ryegrass for resistance to commonly used herbicides for several years. The results of his screening can be found on the Herbicide Resistant Weeds Map

Screening of samples slowed during COVID, but Dr. Burke is gearing back up to screen more samples this year, and he is very interested to know if the poor performance of herbicides this past year, particularly for downy brome, was due to the spread of herbicide-resistant downy brome biotypes. If your herbicide program failed to control downy brome, please consider collecting some downy brome seed from your field and submitting it to the WSU Resistance Testing Program. Visit the Herbicide Resistance Resources page on the Wheat and Small Grains website for more information on herbicide resistance and what you can do to manage the problem.

Wondering about the Stripe Rust forecast for 2023? Check for updates from Dr. Xianming Chen on the WSU Extension Strip Rust News Website. striperust.wsu.edu/news

WSU EXTENSION
Walla Walla County

Coming up...

Jan 10-11—PNW Direct Seed Association Cropping Systems Conference. Kennewick. Directseed.org

Jan 13—Columbia County Noxious Weed Board Annual Growers meeting. extension.wsu.edu/columbia/county-weed-board/

Jan 18-19—NW Hay Expo. Kennewick. wa-hay.org/northwest-hay-expo.html

Jan 24-26— WA OR Potato Conference. Kennewick. potatoes.com/potatoconference

Jan 24—Stop the Spread: Effective Options for Managing Leafroll. Walla Walla wine.wsu.edu/event/managing-leafroll-2023/

Feb 6-9—Winevit. Washington Wine Growers. Kennewick. bit.ly/3PrODz4

WA State Organic and Sustainable Farm Grant

From Tilth Alliance

Tilth Alliance is now accepting applications from farmers seeking financial assistance to support projects that will improve the economic viability, social impacts, or environmental sustainability of their farm businesses and/or community. The goal of these grants is to enhance the operations of farmers practicing responsible and progressive methods such as sustainable soil management, crop diversification, habitat preservation, climate change mitigation and environmentally-safe waste management practices. Learn more and apply by Sun., Feb. 19, 2023!

Please review all grant materials and FAQ on the website. https://bit.ly/3PbHKSk

If you still have questions, email Teri Rakusin: terirakusin@tilthalliance.org.

Problem Weed Survey
https://bit.ly/3ByGDH6

Pacific Northwest Herbicide Resistance Initiative (PNWHRI) – Take the Problem Weeds Survey!

Adapted from Doug Finkelburg, University of Idaho

Pacific Northwest land grant universities and three regional USDA-ARS units are launching a new Herbicide Resistance Initiative. Our goal is nothing short of creating a coordinated, interdisciplinary, systems-based approach to managing herbicide resistance in weeds that is regional in scope and long-term in impact. Supported by all PNW small grains commodity commissions and grain producer's organizations and approved by congress last spring, the PNWHRI will provide ongoing support for programs and projects focused on managing herbicide-resistant weeds across the PNW with a special focus on cereals producing regions.

Interdisciplinary PNWHRI teams are forming around common research and outreach goals which should speed new knowledge production and better management practice adoption in coming years. USDA-ARS units at Pullman, Washington and Pendleton, Oregon are adding new research personnel dedicated to supporting this project. Initial project funds are supporting some much-needed equipment purchases at our land grant university weed science programs, expanding their capacity to conduct fundamental and applied science.

Beyond a welcome investment in herbicide resistance related hard science, the PNWHRI supports social science efforts to understand and potentially address reluctance to adopt practices which will mitigate or prevent development of herbicide resistant weeds. Finally, Extension programs at our three land-grant universities will be in the thick of things, transferring new knowledge developed through the PNWHRI research efforts into educational products for growers and agricultural professionals.

To that end, one of the initial Extension efforts is to help define which weeds are currently giving PNW grain producers headaches, where they are, and what kind of production system they are being found in. You can participate in our regional problem weeds survey by following the QR code to the survey link. No personal data is collected, and we'll be accepting responses over the winter at various grower meetings our three land grant institutions (The University of Idaho, Washington State University, and Oregon State University) host. Results will help shape the PNWHRI's further research and outreach efforts going forward.

2022 Wheat Variety Testing Data Available From WSU

- Hard red winter and spring wheat data are now updated in the variety selection tool and mobile app available from smallgrains.wsu.edu/variety/variety-2022-data/
- 2022 Variety Testing Brochure is here: smallgrains.wsu.edu/variety/variety-testing-brochures/

Forage Budgeting with Non-Traditional Sources of Hay

Adapted from Mark Z. Johnson, Oklahoma State University Extension in Beef Magazine

Determining how much forage cows will eat on a per day and per month basis for the duration of winter always requires a little "cowboy math". Chapter 16 of the eighth edition of the OSU Beef Cattle Manual is an excellent reference for estimating intake and the nutritional requirements of dry and lactating beef cows.

Making the best estimation of how much hay you will need over the next few months still requires a feed analysis test. The information gained through an analysis, like TDN (energy content) and Crude Protein serve as a guide of two things: 1) how much cows will consume, and 2) how much they will need of a specific hay (or feed supplement) to meet their nutritional requirements.

Determining how much forage is needed requires a little "Cowboy Math"

For example, a 1300 pound, dry cow in the last trimester of pregnancy requires 13.3 pounds of TDN and 1.84 pounds of energy per day. A hay testing with 54% TDN and 7.5% Crude protein consumed at 1.9% of her body weight results in a daily dry matter intake of 24.5 pounds of dry matter. This intake of this hay will meet her daily needs without additional supplementation.

If we consider how much actual hay we need to provide each day a few more items need to be taken into consideration:

1. **Hay isn't all dry matter**. Assuming our hay is 90 – 93% dry matter (or 7-10% water). Taking this into account adds another 2-3 pounds of hay per day "as fed".
2. **Hay will be wasted**. Depending on quality of the hay, weather, type of hay feeder used or feeding method, cows will waste 6 – 20% of each bale fed. If you are feeding a non-traditional hay there may be more sorting by cows. Specifically, the bottom end of the corn or sorghum stalk is very low in nutrient quality, cows will sort out most of this portion and intake will be very low. In the past few weeks, I am hearing estimates from producers feeding cornstalk hay that up to 30-40% of the bale is stalks which cows will not eat. This needs to be taken into consideration. Assuming 20% of each bale is wasted, it adds another 7-8 pounds of hay per day "as fed". After taking dry matter content and waste into account we are looking at 34-35 pounds of hay per day needed.
3. **What does each bale weigh and how much is spoiled?** If you have purchased hay by tonnage, it is easy to calculate the average weight of each bale. Rule of Thumb for estimating how much spoilage per bale: approximately 1/3 of the bale weight of a 5 ½ foot diameter round bale is in the outer 6 inches. Even 2-3 inches of spoilage on the bottom side of the bale can equal a substantial loss.

Hay is highly valuable and in short supply. Use these guidelines to estimate at how much you need to be providing per cow per day and extend it over the winter to decide how much hay inventory is enough.

One final point, feeding waste can be reduced! Open bottom round bale feeders can have up to 30% waste, sheeted bottom feeders can reduce this to 20%. Cone feeders can reduce the waste to less than 10%.

References: Chapter 16, page 131. Eight Edition OSU Beef Cattle Manual

SOIL CON

WASHINGTON SOIL HEALTH WEEK

#WASoilCon

FEB 14-15, 2023

Taking Soil Health Principles to Practice: SOIL CON 2023

Adapted from WSU Tree Fruit

The Washington State Soil Health Initiative (WaSHI), with support from Western Sustainable Agriculture Research and Education (WSARE), is happy to announce SoilCon 2023. This free, virtual conference will bring research, extension, and production together to move soil health principles into practice. SoilCon 2023 will be held on February 14th & 15th, with sessions running from 8:00 am-12:00 pm PST each day.

Topics will be relevant to agriculture or natural resource professionals, producers, consultants, University faculty and students, and interested members of the public. For more information and to register for SoilCon 2023, Attendance is free and open to all.

All sessions will be held online on February 14th & 15th, 8:00 am-12:00 pm PST.

Register for SoilCon 2023 Here:

https://pheedloop.com/wasoilcon23/site/home/

Don't Let Your Physical Activity Freeze this Winter

Adapted from Snap-Ed

Here are some tips and tricks to keep you moving during these dark, chilly months!

- Make everyday tasks more physical. Walk around during phone calls, put on some fun music and dance while you clean the house, and do some stretching exercises during television commercial breaks.

- Don't let the cold weather stop you! Bundle up and enjoy the chilly temperatures with a winter walk or hike, or join a snowball fight with the neighborhood kids.

If you are stuck at home, practice some yoga or set up an indoor obstacle course for the kids!

Try some at-home exercises or an at-home fitness video using things you already have at home or with no equipment.

Need some additional ideas on how to keep moving? Check out the Snap-Ed Physical Activity page for more resources!

https://bit.ly/2NWVjbW

WSDA Launches Bilingual Resource to Help Farmers Reduce Risk of Foodborne Illness

Adapted from Amber Betts, WSDA Communications

The path that food takes before it arrives on your plate is long and has many steps. Along the way there are microorganisms everywhere. These little guys (the microorganisms I mean), can contaminate our food and cause widespread illness in our communities.

That is why cleaning and sanitizing every surface and tool that touches produce is vital to public health.

Not only is it important, but it's also required of most farmers by the Food Safety Modernization Act (FSMA) Produce Safety Rule.

WSDA, along with our partners at the University of Georgia and New Mexico State University, developed an online-animated tool with three learning modules to help educators and farm managers reinforce fundamental cleaning and sanitizing concepts. It emphasizes how to select a sanitizer and monitor its concentration using test strips and titration kits. The interactive tool simulates how to follow proper monitoring procedures, evaluate results, and record findings.

WSDA

All content is available in English and Spanish.

To access the tool, visit https://farmsanitizing.nmsu.edu/

Tips for Preparing Trees for Winter

Adapted from Tree Link News, Washington Department of Natural Resources

Wrap the trunk. Some recently planted, thin-barked trees like honeylocust, ash, maple and linden are susceptible to bark-damaging sunscald and frost cracks when temperatures fluctuate in fall and winter. Wrap trunks of younger trees up to the first branches using commercial tree wrap to protect the bark. Remember to take the wrap off, once weather warms in the spring.

Mulch. Spread 2 to 4 inches of wood chips, bark or other organic mulch over the root system of the tree. It will help reduce soil evaporation, improve water absorption and insulate against temperature extremes. To prevent rodent damage, and the possibility of rot, make sure that mulch does not rest against the trunk of the tree. Consider layering leaves around the base of each tree as natural mulch.

Photo Credit: Robert Videki, Doronicum Kft., Bugwood.org

Give them a drink. Water trees throughout the dripline of the tree; that is the area from just outside the trunk to the outer edge of the longest branches. Trees need about 10 gallons of water per inch of tree diameter. Long, slow watering will assure that water reaches down into the root zone. If this winter brings long periods of dry weather (2-3 weeks without snow cover), and the ground is not frozen, it is a good idea to provide trees with supplemental water.

February is American Heart Month

Tammy Roberts. MS, RD, LD, Nutrition and Health Education Specialist, Barton County University of Missouri Extension

Heart disease is the number one cause of death in the United States. In 2002, President Bush proclaimed February American Heart Month. It is during this month that we should review the risk factors for heart disease, the warning signs of a heart attack and check our personal habits to assure we are doing everything possible to keep our hearts healthy.

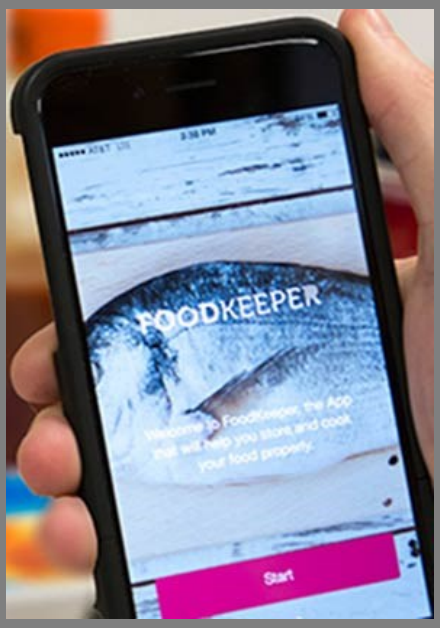
There are risk factors for heart disease that we have no control over such as age or family history of heart disease. However, there are more risk factors for heart disease that you can control. They include: lack of physical activity, overweight and obesity, too much alcohol intake and cigarette smoking. High blood cholesterol is also a risk factor for heart disease. As cholesterol rises, so does the risk for heart disease. Blood cholesterol can be controlled with any combination of diet, exercise and medication.

Two other risk factors for heart disease include diabetes and high blood pressure. Many people are walking around with one or both of these conditions and do not know it. The American Diabetes Association recommends people be screened for diabetes regularly starting at age 45. Blood pressure should also be checked on a regular basis. Ideally, your blood pressure reading should be at or below 120/80.

When a person does suffer from a heart attack, getting the patient to the hospital quickly is crucial for life-saving measures to be taken. For this, the American Heart Association says it is important to know the warning signs of a heart attack. Signs include:

- Chest discomfort that may feel like uncomfortable pressure, squeezing, fullness or pain.
- Discomfort in other areas of the upper body which may include one or both arms, the back, neck, jaw or stomach.
- Shortness of breath with or without chest discomfort.
- Other signs which may include breaking out in a cold sweat, nausea or lightheadedness.

February is also the month we remember our special loved ones on Valentine's Day. If you have a risk factor for heart disease, do your loved ones a favor and make just one change to prevent or delay the onset of heart disease. One thing you can do that doesn't cost any money is walk briskly for 30 minutes most days of the week. Walking helps the cardiovascular system work more efficiently, helps control blood sugar and cholesterol.



FoodKeeper App

Adapted from FoodSafty.gov

The FoodKeeper app provides guidance on the safe handling, preparation and storage of foods. The app offers specific storage timelines for the refrigerator, freezer, and pantry for various products including meat, poultry, produce, seafood, dairy products and eggs, and more. The app educates consumers and provides many different resources that can help reduce the risk of foodborne illness.

With the app, users can:

- Access cooking tips and methods for various types of meat, poultry and seafood products.
- Add products to their device's calendar and receive notifications when they are nearing the end of their recommended storage date.
- Receive information on food safety recalls.
- Search food and beverages in English, Spanish and Portuguese.

Want to reduce food waste at home? Use the "Add to Calendar" feature and receive reminders to use products before they spoil.

Winter Garden Activity Guide

Adapted from PennState Extension

Planning

Finalize your vegetable and flower garden plans. Research and select the plant varieties, as well as the number of plants required for your desired harvest. Draw your plans on paper or take photographs; measure your garden plots for greater accuracy in determining the number of seeds and plants you will need. Purchase a paper notebook or a flash drive to start this year's garden journal.

Equipment preparation

Inventory your seed-starting supplies and equipment. Based on your garden size, determine the number of seedlings you want. Decide if you want to use peat pots, plastic trays or other containers. Assure that you have enough seed starter medium, pots, seeds, and trays. Check your light source and replace bulbs if needed.

Inspect your garden tools. Decide which tools to keep, replace or donate. If not completed in the fall, clean tools and repair broken ones. Sharpen shears and pruners.

Take stock of your gardening accessories, such as tomato cages, labels, and containers. Repair and clean items as needed.

Indoor plants

Give your indoor house plants some much-needed attention. Wipe leaves with a damp cloth, removing any holiday dust and glitter. Keep the soil moist but not soggy, as soils tend to dry out more quickly during the winter months. Snip away dead or discolored leaves. Inspect leaves and stems for signs of insects, such as mealybugs and scale. Isolate and treat plants that appear to be infected or discard the plants in the trash.

Holiday flowering plants after-bloom care

Place poinsettias *(Euphorbia pulcherrima)* in bright light and keep the soil moist. Discard poinsettias that lose their leaves or show signs of insects or disease.

Pinch off spent blooms from the Christmas cactus (*Schlumbergera* spp.) and keep this plant in bright light with moist soil.

Cyclamen (*Cyclamen persicum*) tubers should continue to bloom during the winter months. Avoid wetting the leaves and stems and drain away excess water to prevent tuber rot. Pluck faded flowers and leaves from the plant. New leaves and blooms may appear during the blooming cycle. Offer fertilizer every other month.

Remove the floral stock from your amaryllis *(Hippeastrum* spp.*)* after the flowers have faded. Continue to water and fertilize the bulbs during the winter.

Outdoor plants

Remove dead, diseased or broken tree or shrub branches. Seek assistance for removing unsafe branches near homes, buildings and electrical wires. Photograph trees' branch structures in preparation for late winter pruning. The leafless branches afford the opportunity to evaluate overlapping branches and overall tree shape and size. Consult with an arborist, if needed.

Agriculture Can Be Stressful- You're Not Alone

Agriculture is known to be a dangerous occupation full of potential stressors like weather, changing economic markets and machinery breakdowns. When these start to compound many farmers experience excessive stress, making it hard to move forward to positive solutions.

Due in part to the stresses faced in farming, agricultural workers have high rates of suicide. This loss of parents, siblings, children and spouses can be avoided – if you or someone you know is experiencing excessive stress or thoughts of suicide, please reach out to a confidential crisis support line.

For more resources: https://extension.wsu.edu/skagit/suicide-prevention/

988 SUICIDE & CRISIS LIFELINE

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Celebrating 100 Years of Extending Knowledge and Changing Lives.

Debbie M. Williams
County Extension Director