Welcome to the WSU Garfield County Extension Newsletter!
This is an electronic newsletter highlighting events and topics of interest to residents of Garfield County and the surrounding area. This newsletter can also be viewed on our website: https://extension.wsu.edu/Garfield/

CORONAVIRUS COVID-19
COVID-19 Advisory: WSU Extension is working to keep our communities safe. All Extension programming is being provided virtually, postponed, or canceled. Effective March 16, 2020, WSU Extension county offices and WSU Research & Extension Centers will be closed to the public. We are available via email at Lisbeth.randall@wsu.edu, and by phone at 509-843-3701.

Do you have an event or subject you would like added to our newsletter or website? Would you like to be removed from our Extension Newsletter email list?
Contact the Extension Office
Phone: 509-843-3701 Email: lisbeth.randall@wsu.edu

Contact Us:
Office Location: 757 Main St. Mark Heitstuman, County Director
Pomeroy, WA 99347 heitstuman@wsu.edu
Mailing: PO Box 190, Pomeroy, WA 99347

Hours: Monday-Friday 8:30 –5:00 Sheree Ledgerwood, 4H Coordinator
(closed 12:00-1:00) shereeledgerwood@wsu.edu

Phone: 509-843-3701 Lisbeth Randall, Office Manager
Fax: 509-843-3341 lisbeth.randall@wsu.edu

Website: https://extension.wsu.edu/garfield/

Washington State University helps people develop leadership skills and use research based knowledge to improve their economic status and quality of life. Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your local Extension Office.
STRIPE RUST PREDICTED TO BE SEVERE
Tim Murray, WSU Plant Pathologist

On March 1, Dr. Xianming Chen, ARS Plant Pathologist, released his most recent stripe rust forecast for the coming season. During their February surveys 2 weeks ago, Dr. Chen’s team found active rust in commercial wheat fields in Lincoln County where rust was present in Fall 2019, but did not find rust in Adams, Benton, Douglas, Franklin, Grant, or Walla Walla Counties’ commercial fields. Rust was found in their experimental plot near Walla Walla. Dr. Christina Hagerty found active stripe rust in an experimental nursery near Pendleton in Umatilla County, Oregon during this same week.

Given the very mild weather that occurred from December through February, it was no surprise that the potential yield loss from stripe rust is predicted to be 48% on highly susceptible varieties with no fungicide application. This is an increase of 4% over the forecast made in January. Dr. Chen uses several models that incorporate weather data from November through February to arrive at this estimate. It’s important to keep in mind that this forecast is based on a highly susceptible variety that Dr. Chen uses as a long-term check with no fungicide application. Predictions of yield loss for moderately susceptible to susceptible commercially grown varieties is about 24% yield loss.

Given the mild winter and conditions favorable for severe stripe rust in 2020, it’s recommended that a fungicide is included at herbicide application for moderately susceptible to susceptible winter varieties, i.e. those with ratings of 5 to 9 in the Washington State Crop Improvement Seed Buyer’s Guide (link) and the Variety Selection tool on the Wheat & Small Grains website (link). Scout fields of varieties with ratings 1-4 and apply fungicide when 1-5% of plants have active rust (yellow-orange sporulation on leaves); it’s unlikely that varieties rated 1-2 will require fungicide application, but rust may develop on those rated 3-4.

For spring wheat, we recommend planting the most resistant variety possible, i.e. those with ratings less than 4.

Stay tuned for more rust updates as conditions change. In the meantime, you can find additional information on stripe rust, including photos showing rust percentage under the Foliar Fungal Diseases page in the Disease Resources section of the WSU Wheat and Small Grains website.

Questions or comments, contact Tim Murray via email at tim.murray@wsu.edu or via phone 509-335-7515.
WSU SCIENTISTS ENLIST CITIZENS IN HUNT FOR GIANT BEE KILLING HORNET
CAHNRS News

Asian giant hornets, first encountered in Washington state in 2019, pose a huge problem for honey bees. See details in the infographic.

More than two inches long, the world’s largest hornet carries a painful, sometimes lethal sting and an appetite for honey bees. It’s also the newest insect invader of Washington state.

The Asian giant hornet, *Vespa mandarinia*, is unmistakable, said Susan Cobey, bee breeder with Washington State University’s Department of Entomology.

“They’re like something out of a monster cartoon, with this huge yellow-orange face,” she said.

“It’s a shockingly large hornet,” added Todd Murray, a WSU Extension entomologist and invasive species specialist. “It’s a health hazard, and more importantly, a significant predator of honey bees.”

Cobey, Murray and other WSU scientists are bracing for the giant hornet’s emergence this spring. Sighted for the first time in Washington last December, the hornet will start to become active in April. WSU researchers are working with the Washington State Department of Agriculture, beekeepers, and citizens to find it, study it, and help roll back its spread.
Voracious predator

In the first-ever sightings in the U.S., WSDA verified two reports of Asian giant hornet late last year near Blaine, Washington, and received two probable, but unconfirmed reports, from sites in Custer, Washington. It is not known how or where the hornet first arrived in North America. Insects are frequently transported in international cargo, and are sometimes transported deliberately.

At home in the forests and low mountains of Eastern and southeast Asia, the hornet feeds on large insects, including native wasps and bees. In Japan, it devastates the European honey bee, which has no effective defense.

The Asian giant hornet’s life cycle begins in April, when queens emerge from hibernation, feed on plant sap and fruit, and look for an underground den to build their nests. Once established, colonies grow and send out workers to find food and prey.

Hornets are most destructive in the late summer and early fall, when they’re on the hunt for sources of protein to raise next year’s queens. V. mandarinia attack honey bee hives, killing adult bees and devouring bee larvae and pupae, while aggressively defending the occupied colony. Their stings are big and painful, with a potent neurotoxin. Multiple stings can kill humans, even if you’re not allergic.

Forever changes

Growers depend on honey bees to pollinate many important northwest crops like apples, blueberries and cherries.

With the threat from hornets, “beekers may be reluctant to bring their hiver here,” said Island County Extension scientist Tim Lawrence.

“As a new species entering our state, this is the first drop in the bucket,” said Murray. Once established, invasive species like the Spotted wing Drosophila fruit fly or the zebra mussel make “forever changes” to local crops and ecologies.

“Just like that, it’s forever different,” Murray said. “We need to teach people how to recognize and identify this hornet while populations are small, so that we can eradicate it while we still have a chance.”

Beekeepers, WSU Master Gardener volunteers, and other Extension clients are often the first detectors of invasive species. WSU scientists are now spreading awareness of the hornet to citizens, and developing a fact sheet to help people identify and safely encounter the insects.

As partners with the Washington Invasive Species Council, they also urge citizens to download the WA Invasives smartphone app (https://invasivespecies.wa.gov/report-a-sighting/invasive-insects/) for quick reporting of sightings.

“We need to get the word out,” said Lawrence. “We need to get a clear image of what’s happening out there, and have people report it as soon as possible.”

Early detection, faster eradication

Scientists with the WSDA Pest Program are taking the lead on finding, trapping and eradicating the pest. WSDA will begin trapping for queens this spring, with a focus on Whatcom, Skagit, San Juan, and Island counties.

“Our focus is on detection and eradication,” said WSDA entomologist Chris Looney.

The agency plans to collaborate with local beekeepers and WSY Extension scientists and entomologists, with WSU focusing its efforts on management advice for beekeepers.

Regular beekeeping sites are poor protection against this hornet’s sting, said Looney. WSDA ordered special reinforced suits from China.
“Don’t try to take them out yourself if you see them,” he said. “If you get into them, run away, then call us! It is really important for us to know of every sighting, if we’re going to have any hope of eradication.”

- To report an Asian Giant Hornet sighting, contact the Washington State Department of Agriculture Pest Program at 1-800-443-6684, by email to pestprogram@agr.wa.gov or online at agr.wa.gov/hornets.

- For questions about protecting honey bees from hornets, contact WSU Extension scientist Tim Lawrence at (360) 639-6061 or by email to timothy.lawrence@wsu.edu.

Asian giant hornets are usually about 1.5 to 2 inches in length, with an orange-yellow head and striped abdomen (Photo courtesy of WSDA).
How to care for hummingbird feeders
(Please don’t kill with kindness)

Wetlands & Wildlife Care Center
21900 Pacific Coast Highway
Huntington Beach, CA 92646
(714) 374-5587

Proper care of Hummingbird feeders takes a significant commitment on your part, so please consider this before you start. Please Note: If you do not follow these instructions, you could be responsible for giving Hummingbirds a serious and deadly fungus infection. This fungus condition causes their tongues to swell, making it impossible for the Hummingbird to eat. Ultimately, they die of starvation, a slow and painful death. Please do it right or don’t do it at all.

WHAT DO HUMMINGBIRDS EAT?
The Hummingbird diet consists of small soft body insects (aphids, gnats, small spiders), small fruit flies that feed on rotten fruit, etc.) and nectar from flowers which is mostly sucrose. When you put up a feeder, you are providing them an easy access to only the sucrose part of their diet. This is very important when flower nectar is in short supply.

SELECTION OF FEEDER
Purchase a feeder that has no hidden areas. Be sure all the inside surfaces can be reached and cleaned with a bottle brush (this will eliminate many types).

Feeder Food: Sugar water prepared as below:

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<tr>
<th>One (1) Part White Sugar</th>
<th>Do not boil sugar</th>
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<tbody>
<tr>
<td>Four (4) Parts Boiled Water</td>
<td>Re-measure after boiling</td>
</tr>
<tr>
<td>Cool to room temperature and then fill feeder</td>
<td></td>
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</table>

The above ratio approximates the sugar to water ratio present in the nectar of Hummingbird flowers. Too much sugar is hard on their liver and kidneys. Too little sugar will not provide the needed calories and may cause them to lose interest in your feeder.

Do not use:
- Red Dye
- Commercial Hummingbird food
- Honey or artificial sweeteners
- Anything other than the one to four sugar water mixture described above.

Hanging the feeder:
You can use a piece of coat hanger to hang the feeder. Apply Vaseline to the hanger if you have an ant problem. Hang the feeder in the shade where the Hummingbirds are safe from cats.

Maintain feeder cleanliness

You will need to wash the feeder out in very hot water every two to three days. Use a bottle brush to scrub all surfaces then rinse well. In hot weather, above 60 degrees, clean and change feeder every 2 days. Hummingbirds put their tongues into the feeder to drink and sugar water is a good medium for the growth of pathogens. If you see any mold in the feeder or the mixture becomes cloudy, then it was left up too long (you blew it). Remember, if it is not clean enough for you to drink from then your feeder is not fit for these delicate little Hummingbirds. Proper maintenance of feeders needs to be strongly emphasized. The Wetlands & Wildlife Care Center’s Hummingbird rescue team rehabilitates hundreds of hummingbirds of which 10% or more of those received have fungus infections from improperly maintained feeders. These include sick adults or the sick babies of dead or about to die mother Hummingbirds. Unfortunately, not all of them make it. Because of their diet, treatment of candidiasis in Hummingbirds is extremely difficult.

Fruit and flowers
You can put out spoiled fruit in a plastic bucket, which will draw small gnat and fruit flies. You can get Hummingbird flowers and/or seed mixture from your nursery. Always consider the cat problem and hang where cats can’t pick off the Hummingbirds (they get very good at doing that).

You found a hummingbird
Put it in a shoebox on crumpled Kleenex. Put a pencil size hole in the cover, cover the box and keep it warm and quiet. Specialized care and diet is required for captive Hummingbirds. Please call (714) 374-5587 option 5, then option 9 for detailed information and get it to one of our Hummingbird Rehab Team members as soon as possible.
Lisa (714) 361-3385  Melissa (714) 713-1149
Helen (714) 635-3368  Amanda (714) 376-1894
All Creatures Care Cottage (949) 642-7151
Hello Gardeners,

As we have had a very dry spring, you may need to water more than usual. If you are planting cool season seeds keep the soil moist. Small seeds need loose soil for their tiny leaves to break through. Hard soil will slow germination.

Keep planting salad and root crops every 10 days so you will have fresh vegetables until it is too warm to get a good crop. Tomatoes, peppers and other warm season crops want warm soil. Make sure soil is warm or be prepared to cover plants until day temperatures are in the sixties and nights are in the upper forties.

Corn is divided into types, (SE) is the most hardy and will tolerate cool soil, the other two need warm soil to germinate quickly. Super Sweet (sh2) need to be isolated from other corn varieties so they don’t cross pollinate. If they cross pollinate the ears produced will be tough, not sweet and juicy. A newer type is (SY) Synergistic. They combine differing genetics (like yellow and white kernels) on the same ear. They synergistic varieties do not need isolation. Plant in blocks to get good germination. The days to maturity on the seed packet is for ideal conditions. Add a week to ten days for conditions in our area.

Plant bean varieties with dark seeds early. They are more hardy than white seeded varieties and will tolerate cooler soil. Beans are subject to several viruses, root rot disorders and molds, so take care not to over water. Water early morning so soil and leaves can dry during the day. Again, plant some of your seeds every 10 days to spread out harvest.

A crop to plant right now is beets. The leaves can be eaten in salads or steamed. Just harvest the larger outer leaves at first. Continue to harvest outer leaves as they mature. You will be able to harvest well into the fall. The leaves make a good substitute for spinach which bolts in hot weather. The roots can be harvested in the fall but might be tough if too large.
In the Flower Garden

Dahlias and Gladiolas like warm soil. To get earlier blooms, plant these in containers and transplant to the garden when it gets warm. Easy annuals to start from seed are Poppy, Clarkia, Cosmos, Marigolds and Stock. Most other annuals and perennials are best if bought as started plants this time of year. Our local nurseries are open and have a good selection of annuals to trees. As well as gardening tools and supplies. When looking for new plants consider planting perennials that Butterfly and pollinator bees like. Pollinator bees are not aggressive and do not sting.

Leave foliage on spring flowering bulbs at least 4 weeks. Prune spring flowering shrubs and trees soon after they bloom, so they can grow new wood for next years flowers. Apply mulch as needed, but don’t get it around the trunk. Also, mulch can harbor slugs and other insects that can eat your plants so watch for problems. Also, dogs will eat slug bait so be careful to get the kind that is not harmful to dogs.

In the Orchard

Fire blight in apples and pears, peach leaf curl on peaches and nectarines, will start to show up this time of year. If you find you have one of these problems, contact the Extension office for information on control. Fruit should be thinned so the fruit is at least 4 inches apart but 6 inches is better. This should be done about a month after the tree blooms. This year with some nights in the low 20 degrees during mid March, there may not be as much need for thinning. Thinning discourages over bearing and early fruit drop which leads to a very light crop the next year. You will also get larger fruit as the tree can put its energy toward fewer fruits. Also, a lot of fruit on a branch can cause it to break as the fruit gets larger and heavier. Watch for insects such as the Codling moth.

Benefits of Gardening

With all of the distancing and stay at home order, now is a great time to get out in your gardens! It is a safe activity, get you outside in the fresh air, and is a great form of exercise! You will burn calories and strengthen your heart! Gardening reduces stress and will help you sleep better! Gardening will improve your hand strength with all that digging, planting and pulling. Love of gardening is a great thing to pass along to children. Early exposure to dirt has been linked to all kinds of long-term health benefits, from reducing allergies to autoimmune diseases. You also will save money on your grocery bill growing your own produce! So get out and get busy in your gardens!
Family Living

COVID-19 Pandemic and Your Food
Stephanie Smith, WSU Food Safety
this article appeared in the Moscow daily news

During the COVID-19 pandemic, many of you may be wondering if the virus causing the pandemic can be transmitted through food and cause human illness. Moreover, a recently published study showed that the virus was detectable for up to 24 hours on cardboard and up to three days on plastic and stainless steel, which may make you wonder if food packages, shelves and storage containers in the stores can make you ill.

You will be happy to know that the USDA has stated that there is not evidence to suggest the virus can be transmitted to people through food or food packaging, regardless of where the food item originated from. Moreover, according to the CDC, SARS-CoV-2 is a respiratory virus that is spread from person to person through respiratory droplets, and will likely result in destruction of the virus as it passes through the gastrointestinal tract. Although it may be possible that a person can become infected by touching a surface that has the virus on it and then touching their mouth, nose, or eyes, this is not the primary way the virus will spread. Overall, there is a very low risk of spread from food products or packaging.

Despite these reassuring facts, it is still important to follow good hygiene practices when shopping and preparing food at home. Always wash your hands properly before, during and after preparing food, after using the toilet, before and after caring for someone who is sick, and after blowing your nose, coughing, or sneezing. Use plain soap and water and scrub the back and palms of your hands, wrists, and under your nails for at least 20 seconds. Rinse your hands, then dry with a clean towel. This is one of the most important steps you can take to prevent yourself from becoming infected. Keep your hands away from your face, eyes and nose, especially after touching surfaces that may be contaminated in the store or in your home.

Always wash cutting boards, dishes, utensils, and countertops with hot, soapy water. Cleaning a surface with soap and water, then rinsing, is the first step before disinfection, as many disinfectants will not work properly if a surface contains a lot of dirt. Countertops and other household surfaces, such as tables, doorknobs, light switches, toilets, faucets and sinks can be disinfected using household products such as Clorox wipes. The EPA has a list of approved disinfectants effective against Coronavirus. If using a commercially produced household disinfectant, be sure to follow the directions on the label for disinfecting surfaces. Most disinfectants will require that the surface remains wet with the product for an extended period. You will need to ensure that the product remains wet on the surface for the time indicated on the label for disinfection. A simple bleach solution of 4 teaspoons to one quart of water is also very effective and less costly. You can also use alcohol solutions that contain at least 70% alcohol. However, please remember that alcohol is flammable, and the surface will need to be kept away from excessive heat or flames until it dries. Be sure to wash dirty cloths and towels in your washing machine often using hot water.
Family Living

If you are sick, do not prepare food for other household members. The CDC recommends that ill people should eat in their own room, away from others, if possible. When preparing food, be sure to wash fruits and vegetables, under running water. Do not use soap, bleach, or commercial produce washes as these are no more effective than running water and often have not been approved for household use on food. Always scrub produce with firm skins (such as cucumbers and potatoes) using a clean produce brush. Produce can be dried using a clean towel or paper towel. Currently there is not enough data to indicate if cooking or refrigeration will kill SARS-CoV-2. However, given the limited duration of survival on surfaces, it is unlikely that the virus will survive on food packaging for longer than 24 hours.

By following these tips, you can further reduce the risk of becoming infected or spreading SARS-CoV-2. For more information on Coronavirus and food, visit the following websites:
https://usda.gov/coronavirus or
https://extension.wsu.edu/foodsafety/covid-19-resources

Dr. Stephanie Smith is an assistant professor and statewide consumer food specialist for Washington State University Extension. She can be reached at food.safety@wsu.edu.

RESOURCES ON COVID-19 AND FOOD SAFETY


EPA List of Disinfectants Against Coronavirus: https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

FightBac Resource Website: https://www.fightbac.org/coronavirus-resource-page/
**Get Ready to Grill Safely**

**Separate**
When shopping, pick up meat, poultry, and seafood last and separate them from other food in your shopping cart and grocery bags.

**Chill**
Keep meat, poultry, and seafood refrigerated until ready to grill. When transporting, keep below 40°F in an insulated cooler.

**Clean**
Wash your hands with soap before and after handling raw meat, poultry, and seafood. Wash work surfaces, utensils, and the grill before and after cooking.

**Cook**
Use a food thermometer to ensure meat is cooked hot enough to kill harmful germs. When smoking, keep temperature inside the smoker at 225°F to 300°F to keep meat at a safe temperature while it cooks.

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<tr>
<th>Temperature (°F)</th>
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<tbody>
<tr>
<td>145°F</td>
<td>beef, pork, lamb, veal (then let rest 3 minutes before serving)</td>
</tr>
<tr>
<td>145°F</td>
<td>fish</td>
</tr>
<tr>
<td>160°F</td>
<td>hamburgers and other ground meat</td>
</tr>
<tr>
<td>185°F</td>
<td>poultry</td>
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</table>

**Don’t cross-contaminate**
Throw out marinades and sauces that have touched raw meat juices. Put cooked meat on a clean plate.

**Refrigerate**
Divide leftovers into small portions and place in covered, shallow containers. Put in freezer or fridge within two hours of cooking (one hour if above 90°F outside).

www.cdc.gov/foodsafety
Accessible version: https://www.cdc.gov/foodsafety/communication/10q-4.html
Although 4-H activities are put on hold for now, there are many resources available to keep kids busy and learning. Check a list of great activities put together by King County Extension:

https://extension.wsu.edu/king/learning-links-4-h-and-more/
**Mediterranean Chickpea Tuna Salad**

**www.wellplated.com**

**Ingredients:**
- 1/2 small red onion-thinly sliced
- 3 cups arugula
- 1 15 ounce can chickpeas, drain & rinse
- 1/4 cup feta cheese
- 1 red bell pepper cut into 1/4” strips, then halved
- 1 pint cherry tomatoes—halved
- 1 large seedless English cucumber halved lengthwise and cut into 1/4 inch slices
- 12 ounces solid pack albacore tuna in water
- 1/4 cup parsley finely chopped

**For The Dressing**
- 1/4 cup freshly squeezed lemon juice
- 3 tablespoons extra virgin olive oil
- 2 cloves garlic, minced
- 1 teaspoon kosher salt
- 1/2 teaspoon ground black pepper

**Instructions**
1. Place the red onion in a small bowl and cover with cold water. Let sit while you prepare the rest of the salad (this preserves its flavor but takes off some of the harshness and the continual red onion aftertaste).
2. To a large mixing bowl, add the chickpeas, tomatoes, cucumber, and bell pepper. Drain the tuna and flake into the bowl. Add the arugula.
3. Prepare the dressing: In a small bowl or measuring cup, stir together the lemon juice, olive oil, garlic, salt and pepper. (you can also shake them all together in a mason jar with a tight fitting lid). Drizzle enough over the salad to moisten it, then toss to coat. Sprinkle the feta and parsley over the top, then toss lightly again. Taste and add additional salt, pepper, or dressing as desired. Enjoy!