



Newsletter

Updates

PACKAGED FOODS & VALUE-ADD ON-DEMAND ONLINE COURSE

For entrepreneurs considering moving into the packaged food space or farms looking to develop value-added product(s), this on-demand, self-paced online course will provide a basic overview of the process from concept to market. With 3-4 hours of content, you can watch it all or select the content that is most relevant to you.

With case studies, panel interviews, planning tools, and links to additional resources, you will gain some valuable insight and a basic understanding of what it takes to get started. businessimpactnw.ecenterdirect.com

STRIPE RUST IN THE PACIFIC NORTHWEST

Adapted from Xianming Chen

June 4, 2020: This week, we were completing stripe rust notes of winter cereal nurseries in Mount Vernon (Skagit County), Washington; Hermiston (Umatilla County), Oregon; and Walla Walla (Walla Walla County), Washington. Winter wheat and barley ranged from flowering to soft dough stage. Wheat stripe rust developed to 100% severity on susceptible winter varieties in these locations (**Figure 1**). Barley stripe rust developed up to 80% severity at Mount Vernon and up to 40% severity at Walla Walla on susceptible barley varieties. Stripe rust was quite common on spring wheat at all three locations.

This morning, I was checking fields around Pullman (Whitman Country), Washington. Stripe rust has developed fast over the last two weeks in our experimental fields. Winter wheat ranged from boot to heading stage, and spring wheat from late tillering (Feekes 3) to early jointing (Feekes 5). Stripe rust was up to 50% incidence and averaged 20% severity on susceptible winter wheat varieties. In spring wheat nurseries, stripe rust was easily found in all sites.

Chris Mundt reported that winter wheat variety 'Bobtail' had more stripe rust than ever before in experimental fields in Corvallis (Benton County) Oregon. We did not see any rust on Bobtail in the nurseries in the nurseries at Hermiston, Oregon and Walla Walla, Washington. Bobtail has been highly resistant to stripe rust until Chris' observation.

Chris found stripe rust on winter wheat variety 'UI Magic' at Adams, Oregon (Umatilla County). Similarly, we also saw quite severe stripe rust on this variety at Hermiston and Walla Walla. Stripe rust was quite common on this variety in some commercial fields in central Washington last year. Based on



Figure 1. Severe stripe rust in an experimental field in Walla Walla (Walla Walla County), Washington (June 3, 2020).



Photo by Brian Colombo

Announcements

JULY

2 Fruit Flies and Their Role in Causing Sour Rot, 12 pm—1 pm, Megan Hall University of Missouri. 1-hour Invasive Pests Series webinar geared at understanding how fruit flies contribute to the sour rot complex will lead to more sustainable management strategies and better control of the disease. Free to ASEV members and \$50 per webinar to non-members. Visit: <https://www.asev.org/2020-asev-webinars> for more information.

SEPTEMBER

12 Walla Walla Community Hospice Pond & Garden Tour, 9 a.m. - 4 p.m. A self-guided tour of ten beautiful gardens in the area. Benefiting Walla Walla Community Hospice. For more information, visit www.wwhospice.org or call 509-525-5561.

The WSU Walla Walla County Extension Office is currently closed due to the COVID-19 virus. We anticipate returning to the office when Walla Walla County moves into Phase 3. Appointments will still need to be made prior to visiting our office. We appreciate your patience while we work through the current restrictions. You can contact us at 509-524-2685 or email becki.green@wsu.edu.



MG PLANT CLINICS

Master Gardeners are available for plant issues and identification through our virtual clinic. Visit our website at: <https://extension.wsu.edu/wallawalla/gardening/> to find the clinic forms. Email the form along with photos to: becki.green@wsu.edu.

POSTMASTER send address
changes to:
WSU EXTENSION
328 WEST POPLAR
WALLA WALLA, WA 99362

WSU EXTENSTION NEWSLETTER
PUBLISHED 4-6 TIMES ANNUALLY
VOLUME 2020 NO. 4
WSU EXTENSION
WALLA WALLA COUNTY
328 WEST POPLAR
WALLA WALLA, WA 99362

the last year's data, this variety was rated moderately susceptible. In this growing season, stripe rust has been reported by growers in commercial fields in southeastern Washington, northeastern Oregon, and western Idaho.

As the weather conditions has been conducive for the past two weeks and will continue to be favorable for stripe rust in the next two weeks. Please check wheat fields for stripe rust. For winter wheat, if active stripe rust is present and the crop is before flowering, fungicides can be used. For fields planted with moderate susceptible to susceptible spring varieties (stripe rust ratings 6 to 9), fungicide should be applied at the herbicide application time. If already applied, check fields again about three to four weeks after the application, second application may be needed if stripe rust develops again and the crop is before flowering.

Season Recipe Videos Now Available!

WSU Skagit County Family Living has developed a YouTube channel to inspire creative food prep and enjoyment of the local and seasonal harvest. Visit: https://www.youtube.com/channel/UCrCVqfP0knw7Y1mdRjBylg/videos?disable_polymer=1. The link to the print recipes and feedback survey are listed in the description.



Livestock

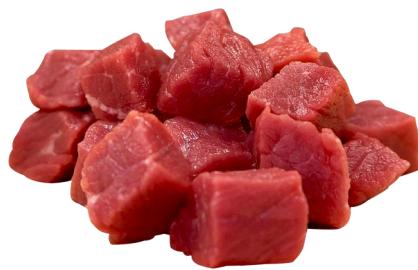
SELLING MARKET ANIMALS FOR DIRECT HOME CONSUMPTIONS

By Sarah M. Smith, Mark Heitstuman, and Paul Kuber

Meat Consumers: Want to buy an animal and have it butchered for home use? Things to consider:

- Prior to purchasing an animal make sure you have a harvest date scheduled. It is becoming more difficult to get a harvest date for animals because of limited number of local butchers and increased demand. Also, if you are wanting to sell part of the meat, in Washington State, there are federal, state and county laws concerning the sale of meat. Without federal inspection, animal must be sold live, prior to harvest in Washington state. Consult with your local health department about requirements for transport, storage and sale of federally inspected meat needs.
- Just like in the commercial industry, freezers and freezer space is limited. To ensure the proper storage of your investment make sure you have a good working freezer with adequate space for the species you are purchasing. In addition to the size of the animal, the amount of bone-in versus bone-out (ground product like hamburger or sausage) will impact the pounds of meat you take home and freezer space.
- Understand the cost associated with having an animal harvested for home use. Especially, for beef cattle weighing about 1350-1500 (live weight) at a market ready standpoint can be a large initial investment. In addition to the cost of the animal (typically sold to individual live prior to harvest by the pound or head), individuals will also be charged a harvest per head fee to harvest (butcher) fee, a cut/wrap fee that is typically based on the hanging hot carcass weight on a per pound bases, and additional cost for curing (ham/bacon) or additional processing (sausage, packaging, etc).

- Your local butcher harvesting and processing your livestock will ask for cutting instructions for how you want the meat cut into specific meat cuts and how much per package. In addition to reviewing what options your butcher has available concerning meat cuts you can choose, you will want to understand options and limitations of what meat cuts can be done by your butcher and how much you can get from one animal—there is only so many t-bone steaks on each steer, a lamb might have 4 legs but you can only get two legs of lamb out of a single lamb, and traditional bacon as you know in the grocery store only comes from the belly of the pig and you should expect about 15 pounds of bacon from a 285 pound market ready pig. You will also want to consider your families' cooking and eating preferences when choosing cuts and package sizes.



Fat Steer (Beef Cattle) Example:

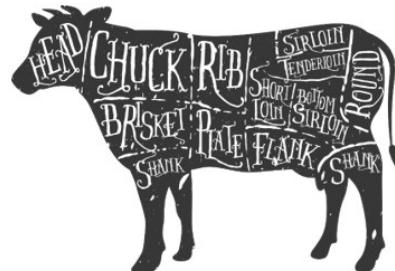
Quick Facts: Harvesting a Beef Animal for Home Consumption

- Most market ready beef steers are raised to be market ready for optimal meat quality at between 16-22 months of age, or between 1300-1500 pounds (steer). However, females, smaller breeds, or dairy influence cattle can have smaller weights*, dressing percentages, and cut-out percentages.

- When harvested, market ready beef steers will typically dress between 60-64%; meaning that the hanging carcass weight will be about 750-950. The more muscle or the fatter an animal is, the higher the dressing percentage will be. Also, the more fill in the animal's stomach, heavier the hide, if the animal has horns, or less muscle, the lighter the dressing percentage will be. Dressing percentage reflects only that portion of the carcass that hangs on the rail after it is butchered. If animals are on full feed when weighed live, dressing percentage can go down to 56-58% on a beef steer.

- A hanging beef carcass will typically yield about 55-60% mostly bone-in, resulting in approximately 415- 575 pounds of meat to take home. However, if you have more cuts made into bone-less products or more grind done for hamburger, the hanging carcass will yield about 50-55% bone-less meat cuts, resulting in about 375-525 pounds of take-home meat. Basically the more fat trimmed and more bone taken out of the meat cuts, the lighter the pounds of meat you will take-home but you must remember it is essential the same amount of total edible meat, it just the difference in how the meat was cut and packaged and the bones were removed at the butcher shop versus when you cook or eat the product.

- Most freezers will hold approximately 35-40 pounds of meat per cubic foot.



Home & Garden

LAWNS ARE GROWING QUICKLY AND SEEDHEADS ARE APPEARING

[Kevin Frank, Michigan State University Extension](#),

Warm temperatures and abundant precipitation have resulted in rapid turf growth and seedheads are now appearing in lawns.

Following cold temperatures throughout most of May, recent warm temperatures and rainfall have lawns exploding in growth. If you've fallen behind on mowing, [Michigan State University Extension](#) recommends raising your mowing height to avoid leaving massive piles of clippings on the lawn, or consider this a time when you can be justified in picking up clippings to avoid smothering the turf. Another smart reason to [raise your mower height](#) is to promote deep roots, avoid grub damage and crowd out weeds.

In addition to surging top-growth, seedheads are also appearing. The common lawn grasses – Kentucky bluegrass, perennial ryegrass and tall fescue – all produce seedheads as do grassy weeds such as



WSU is offering two types of Pesticide Pre-License Review Webinars

Webinars for Private Applicators

- Select one of these dates: June 29, July 27, or August 31

To take exams, you need to [register with WSDA](#) for their regular session or call the **Walla Walla County Extension Office** to verify if they are able to administer private applicator tests at the office at 509-524-2685.

Webinars for All Other License Types

- Webinar dates are July 7, 8 or August 11, 12
- Webinar topic options:
 1. Laws & Safety or Dealer Manager exams
 2. Weed Management exams, Insect & Plant Disease exams.
- These webinar offerings include a testing session July 9 or August 13 in Olympia, Spokane, and Yakima.

Before registering for the webinar: write down the [license type](#) and the [exams](#) you need. These questions are part of the webinar registration. The website above has a link to an [exam selection checklist](#).

License types: Private Applicator, Public Operator, Commercial Applicator, Commercial Operator, Private-Commercial Applicator, Dealer Manager

Exam examples: Private Applicator, Laws & Safety, Agriculture Weed, Right of Way Weed, Turf & Ornamental Weed, Agricultural Insect & Disease, Ornamental Insect & Disease

For more information and to register, visit our webinar website: <https://pep.wsu.edu/pre-license-review-webinars/>

Make sure you review the study materials before the webinar.



Seedheads in a Kentucky bluegrass turf. Photo by Kevin Frank, MSU.

annual bluegrass (*Poa annua*). Seedhead production requires energy from the plant, so it is likely the turf will not only look stemmy due to the seed stalks, but the turfgrass may even lose density.

Consider a fertilizer application following the seedhead flush to help the turf recover, especially if you haven't fertilized yet this spring or fertilized back in April. Keep the mower blade sharp to ensure a clean cut and don't lower the mowing height to try and remove seedheads. Annual

bluegrass produces seedheads below the 0.125-inch mowing height on golf course putting greens, so lowering the mowing height is not going to eliminate seedheads from your lawn.

Family Living

COMMON CANNING QUESTIONS

Sandy Brown, WSU Extension

Steam Canners are on sale, are they safe to use?

Steam canners are not safe to use and we do not recommend using them. They consist of three pieces: a shallow pan filled with about two quarts of water, a perforated rack on which the jars stand and a large dome cover. The promoters of steam canners say the benefits include: less time to pre-heat the water, less water used, cannot boil over, and saves energy.

The major concerns with the steam canners include:

- Cold spots where temperatures are below the 212 F that is needed for heat penetration. This leads to under-processing and poses a potential risk of food spoilage.
- Steam will be released as it builds up under the dome and then cools the canner down.
- Increased jar breakage may occur since jars are not separated by a rack in the canner.
- Steam burns may occur when removing the lid. The dome lid must be lifted straight up and steam will pour out around your hands and arms.

After processing my fruits or vegetables I notice that some of the liquid is loss? Is that safe? What caused it?

There are many reasons for the loss of liquid during processing. Loss of liquid may cause food to darken, but does not interfere with the keeping qualities unless the liquid loss has caused food, grease or seeds to lodge under the lid and prevent a seal.

Some reasons for loss of liquid during processing could be:

- Jar packed too full or too tightly.
- Starch foods absorb some liquid.
- Air bubbles were not removed at the time of packing.



- Jars in a boiling water bath canner were not covered with 1-2 inches of water.
- Pressure canner was allowed to fluctuate during processing.
- Letting a canner stand too long after pressure returns to zero.
- Removing the jars too quickly from the pressure canner after removing the cover.

Can a pressure canner or water bath canner be used on a ceramic cook top?

For water bath canners or pressure canners to work successfully on a ceramic cook top, the canner bottom must be flat, in contact with the cook top and extend no more than 2 inches beyond the design on the cook top surface.

Most heavy cast aluminum pressure canners work on smooth top stoves. The lighter weight stamped aluminum canners usually have a concave bottom. If the concavity is greater than 1/8th inch the canner will not perform well.

Can my pressure canner or water bath canner be used on a solid element cooktop?

Solid element cooktops require heavy gauge, flat, smooth bottom utensils that have no more than 1-2 inch overhang beyond the element. Most pressure canners are too large to be used on solid element cooktops.

Most water bath canners are either too light in weight (aluminum) or have ridged bottoms (enamel) and thus are not suitable for the use on solid elements.

What can be done to make soft jellies firmer?

For jellied products using powdered pectin: Mix in a saucepan ¼ cup sugar; ½ cup water; 2 tablespoons bottled lemon juice, and 4 teaspoons powdered pectin. Bring to a boil while stirring. Add 1 quart jam or jelly and bring to a rolling boil over high heat, stirring constantly. Boil hard for ½ minute. Remove from heat, remove foam and fill sterile jars, leaving ¼-inch headspace. Adjust new lids and process in boiling water bath canner for 10 minutes.

Can I preserve peach, pears, apricots or other fruits without sugar?

Yes, but sugar does add flavor, helps fruit maintain its firmness and color. Sugar moves into the fruit tissues and keeps it firmer. Extra-thin or thin syrups do help add the sweetness and helps prevent the fruit from floating.

If you still don't want to use sugar or cannot use sugar in canning fruits, then consider using water or fruit juice (diluted or straight) for the liquid. Canning with artificial sweeteners can be tricky. Some of them lose their sweetening abilities or turn bitter.



4-H News

Walla Walla County completed two rounds of Public Presentations using two different virtual platforms, Google Classrooms and Zoom. The first contest took place in April and is generally a requirement to participate in the May contest. With Covid-19 and the restrictions in place, we waved the April requirement and made it optional. During the April contest we used the Google Classroom platform, asked youth to record their presentations and upload it to the classroom. 17 youth participated in the contest and 16 blue ribbons were awarded and one green ribbon to a clover bud (5-7 years old).

During the May Public Presentations contest, we had 36 youth participate via Zoom. May is the 4-H State Fair qualifier and top awards are given in each project and age category. 4-H members across the county were invited to attend the presentations as well. We had 10 volunteer judges join us via Zoom, in five different rooms. Utilizing several of the functions within Zoom, the judges were able to ask questions, compare comments and agree on ribbon placing. During the contest, 32 blue (Excellent and 4-H State Fair Qualifiers) ribbons, 2 reds (needs improvement) and 2 green (Cloverbud) ribbons were given out.



Giant hornet antennae remain narrow through the entire length
Alpsdale / CC BY-SA
(<https://creativecommons.org/licenses/by-sa/3.0/>)



Western cicada killer species lack extensive black markings, and have a rusty orange thorax.
Photo credit: Jason R Eckberg via Bugguide
Attribution-NoDerivs-NonCommercial 1.0 Generic (CC BY-ND-NC 1.0)



Our native yellow-jackets and paper wasps are smaller and distinctly patterned with white or yellow markings, not orange!
Photo credit: Megan Asche



Bumble bees are covered with dense hair
Photo credit: Mary Asche



Cimbex sawfly antennae are distinctly clubbed
Photo credit: Stu Adams



Golden digger wasps have an apparent thin waist. The abdomen is not striped but is distinctly orange in the front and black towards the end.
Photo credit: Megan Asche



Asian giant hornets have very few hairs and orange markings.
Photo credit: I, KENPEI / CC BY-SA (<http://creativecommons.org/licenses/by-sa/3.0/>)

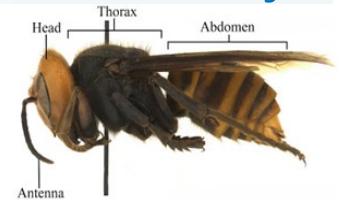
DON'T SQUISH ME! LOCAL INSECTS, ASIAN GIANT HORNETS, AND THE CASE OF MISTAKEN IDENTITIES

Adapted from [Quin Baine](#) and [Chris Looney](#) WSDA Entomology Lab

With the worldwide attention that *Vespa mandarinia* (Asian giant hornets) have received over the last few weeks, our entomology lab has been busy reviewing hundreds of reports of suspected Asian giant hornets. Despite the deluge of reports, only two so far have been confirmed as an Asian giant hornet.

Unfortunately, while their intentions are good, many people have killed and submitted many insects that are NOT Asian giant hornets. Not only are most of these insects not harmful, they play an important role in the environment. We want to compare some of these insects with Asian giant hornet so you can become better a citizen scientist and let insects that are not Asian giant hornets buzz along their way.

Asian Giant Hornet Diagram



Bumble bees

These native pollinators can be colored black, yellow, and orange, and are most easily distinguished from the Asian giant hornet by their round, stout bodies and very fuzzy appearance. A queen bumble bee can be large, almost an inch in length, and they make a noticeably loud buzzing when they fly. However, there is little reason for alarm! Bumble bees are non-aggressive regardless of size. .

Yellowjackets and paper wasps

Most of Washington's yellowjackets are native species that are common during much of the year. Unlike Asian giant hornet, Washington's *Vespula* and *Dolichovespula* are clearly yellow (or white) and black, but not orange. They have distinctive patterning across the head and thorax, while Asian giant hornet is completely orange on the head (except for its black eyes) and almost completely black on the thorax. Yellowjackets can sting, especially when swatted or stepped on. However, these insects are beneficial to the ecosystem as pest control— they feed on many common agricultural plant pests.

Cicada Killer Wasp

This common, native wasp can be very large, sometimes reaching over an inch and a half in length. The western cicada killer (*Sphecius grandis*) and the Pacific cicada killer (*Sphecius convallis*) are both mostly rusty-orange in color with yellow and black markings on the face and abdomen. They are more orange, more slender, and have longer antennae than Asian giant hornets. Though "killer" is in the name, this wasp feeds on other insects, like the cicada, and is typically non-aggressive towards humans. Predatory insects, like the cicada killer, help maintain a balanced ecosystem.

Learning more

Other species that can be confused with the Asian Giant hornet are Great Golden Digger Wasp and Sawflies. Getting to know the insects around you can be fascinating. If you'd like to learn more about local insects, some great resources include the Washington State Master Gardener program, iNaturalist, and BugGuide.com. And of course, if you do suspect you have seen an Asian giant hornet, get a photo if you can safely do so, collect the specimen if it is dead, and report it at agr.wa.gov/hornets.

WASHINGTON STATE UNIVERSITY
WALLA WALLA COUNTY EXTENSION

Celebrating 100 Years of Extending Knowledge and Changing Lives.

Debbie M. Williams
County Extension Director