

## Announcements

### November

**13, 14 Pacific Northwest Ag Industry Expo**, HAPO Center Pasco, WA 8 a.m.—5 p.m. For more details visit: <http://washingtonagnetnetwork.com/pnw-agie/>.

**17 4-H Achievement Night**, Walla Walla County Fairgrounds Community Building, 5:00 p.m. Celebrate the achievements of our 4-H youth. Bring a hot dish and a salad, serving utensils, plates, and silverware for your family and guests.



If you would like to donate an item or a service to the 4-H silent auction, please bring it to the WSU Extension Office at 328 West Poplar Street by November 13th. No used items, please.

**19 Rural Suicide Prevention in Farm and Ranch Communities Webinar, 12:30-4:45 p.m.** The



webinar will feature suicide prevention programs designed to address agricultural stress. To join the free webinar, click on the link and use the dial-in information: <https://hrsaseminar.adobeconnect.com/rsp-farm-ranch-communities/>.

Dial-In: 888-989-7695; Participant Passcode: 6473800. No registration if required.

**19 Walla Walla County Noxious Weed Board Public Meeting**, WSU Extension Office, 328 West Poplar at 1:30 p.m. Open to anyone who would like to add their input to the 2020 county weed program.



### December

**4 Last Chance Pesticide Recertification Class** Walla Walla Regional Airport, 8:30 a.m. to 3:30 p.m. 3-5 WSDA Credits available. Call 509-524-2685 for questions. Fee of \$25 includes lunch. Register online at: <https://www.brownpapertickets.com/event/4432428>.

**11, 12 Pesticide Training & Recertification** Kennewick, Three Rivers Convention Center, 8:00 am – 4:30 pm. Classes for the 2017-2018 WSU Eastern Washington Pesticide Education will be held in Pasco. Class fee is \$60/day (not including license and testing fee) with up to 6 credits/day available. Registration for the courses online at: <http://pep.wsu.edu>. Internet



Recertification One-Credit Classes are available at: <http://pep.wsu.edu/recertonline/>. For questions, call 509-335-2830.

**10, 11 Wheat Academy**, Pullman, WA Vogel Plant Biosciences Building. Learn about the science behind wheat management recommendations directly from the experts during intensive, 90-minute presentations. Registration cost \$150 for ag professionals and \$75 for growers. Visit <http://smallgrains.wsu.edu/2019-wheat-academy/> for schedule and registration information.



### January

**14 Cereal Grain Seminar**, Walla Walla Regional Airport, 8:30 a.m. to 3:30 p.m. 3-5 WSDA credits will be available. Call 509-524-2685 for questions. Fee of \$25 includes lunch.

4-H



**Congratulations** to all of our 4-H state fair participants. Please make sure to thank **Platt Electric** for shipping all our 4-H state fair exhibits!

### 4-H Contest Participants

**Fashion Revue:** Rem McBride— *Overall Intermediate Champion*, Lucy Perkins, Marissa McBride, Sarah Daves, Nannette Cooke, Gracie Olmstead; **Creative Consumer:** Marissa McBride, Kittrick Stroe, Mihai Stroe; **Public Presentation:** Gracie Olmstead, Nanette Cooke, Sarah Daves, Timothy Daves, William Daves, Mihai Stroe; **Kitchen Activities:** Nanette Cooke, Gracie Olmstead.

### Union Bulletin Supports 4-H!

A special thank you to the **Union Bulletin** for the gracious donation of advertising space to celebrate *National 4-H Week!*

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 WALLA WALLA COUNTY  
 328 WEST POPLAR  
 WALLA WALLA, WA 99362

### THANK YOU!

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## Updates

### EGGS CRACK TOP 10 LIST AND OTHER HIGHLIGHTS

Chris McGann, WSDA Communications

Washington's agricultural production top 10 list featured ups, downs and a new listing in the annual [U.S. Department of Agriculture \(USDA\) report](#) released this week.

Our state produced an estimated \$9.67 billion of agricultural commodities in 2018, down 2 percent from the previous year.

#### Notable rankings

The value of all Washington grape production, second only to California's, hit a record high with an estimated value of \$361 million, a 13 percent increase from 2017.

The \$2.19 billion estimated production value of apples was a 10 percent drop from the previous year, but apples remained Washington's top commodity and our state maintained its status as the nation's number one apple producer.



And eggs cracked this year's top 10 list with a 70 percent jump in production value estimated at \$241 million. Pears fell off the list as the 2018 value declined 15 percent to an estimated \$211 million.

#### The 2018 top 10 list

The rest of the list remained largely unchanged with the following rankings:

1. Apples	\$2.19 B
2. Milk	\$1.13 B
3. Wheat	\$845 M
4. Potatoes	\$788 M
5. Cattle	\$652 M
6. Hay	\$519 M
7. Hops	\$428 M (ranked 8th in 2017)
8. Sweet Cherries	\$426 M (ranked 7th in 2017)
9. Grapes	\$361 M
10. Eggs	\$241 M

#### The heavy hitters

The top five commodities for 2018 had a combined value of \$5.60 billion, or 58 percent of the year's value for all commodities.

#### Other upticks

There were several commodities that did not make it into the top 10 production list, but showed significant increases in value from the previous year.

These include onions, which saw an increased value

of 10 percent to \$178 million in 2018. Blueberries also increased, by 21 percent from 2017 to reach \$139 million in 2018. Barley value of production increased 55 percent to \$21.5 million in 2018 and the value of canola, at \$20.3 million, increased 23 percent from the previous year.



#### A few slips

Five of the top 10 commodities declined in value from the previous year, including apples, cattle and calves, hops, and sweet cherries. In addition to pears, other commodities that declined in value in 2018 were raspberries, down 38 percent to \$35.9 million; and green peas, down 21 percent to \$22.8 million.

### DEADLY DEER DISEASE DIAGNOSED IN FOUR EASTERN WASHINGTON COWS

Chris McGann, WSDA Communications



Controlling midges is the best defense against EHD.

Four cows in Franklin and Walla Walla counties were diagnosed this week with Epizootic Hemorrhagic disease (EHD), a potentially deadly virus that primarily affects wild deer populations but occasionally crosses over to cattle.

Cattle owners should be on the lookout for EHD symptoms such as excessive drooling, lethargy, difficulty walking, or oral and nasal lesions with ulceration, which are similar to the much more devastating foot-and-mouth disease.

Fever and anorexia due to the oral erosions were seen in the recently diagnosed cattle. Supportive care is the only treatment for infected cows.

Differentiating EHD from other animal diseases requires laboratory testing so you should contact your veterinarian if you observe these symptoms.

"Although EHD is seldom prevalent in cattle, we must show an abundance of caution and investigate each case due to the similarity of symptoms this disease has with the highly contagious and economically disastrous foot-and-mouth disease," said Washington State Veterinarian Dr. Brian Joseph.

**EHD is not a threat to human health.** The disease usually occurs in cattle where environmental conditions support large populations of biting midges.

Biting midges or *Culicoides* gnats, commonly known as "no-see-ums" are the main way the disease is

spread. Female biting midges can ingest blood from infected animals and then feed on uninfected animals. These midges typically breed near mud, so EHD outbreaks often occur when cattle congregate in wet areas.

All ruminants can be affected, but generally it is a deer disease.

No vaccines are available for EHD, so controlling the midges by eliminating standing water from areas used by cows, applying insecticides around water areas to decrease the swarms, or using bug repellent on the cows is the best defense.

The cool fall weather and frost is expected to limit the gnat population and the spread of the disease.

For more information visit [WSDA's Animal Services Division](#) web page.

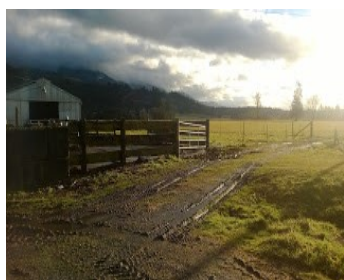
## *Farming & Livestock*

### **PLAN NOW TO MANAGE MANURE AND WATER THIS WINTER**

**Kerri Love**, WSDA Dairy Nutrient Management Program

As the days grow short and bunkers are loaded with the summer's crops, it is also time to ensure manure lagoons are empty and ready for winter rains and storage.

#### **Don't lose valuable nutrients to rain**



Cement blocks and fences hold manure and cows back from wet, muddy areas.

Late season nutrient applications have special risks. Fields may be compacted from harvest and application equipment. The dry summer may have reduced forage crop density. Applying nutrients where they may run off or pool in low spots of your field after our first big rainfall wastes your time and money, and is a risk to

water quality.

Apply nutrients in the right place and at the right rate to ensure they enter the soil where your crops need them most.

- Use expanded buffers, avoid bare soils or slopes, and apply at a rate appropriate for the field and soil conditions.
- Do not pasture animals or apply nutrients to flood-prone areas of fields.
- Incorporate solids into bare fields, especially after

corn harvest where soils can be highly compacted from silage trucks.

To evaluate weather and run-off risk, check the three-day forecast for rainfall.

- A great tool in Western Washington is the [Manure Spreading Advisory tool](#). Click on the map on a location near you and see a 72-hour weather forecast with an associated risk rating for applying nutrients.
- Pro tip – you can print the weather forecast or save a screen shot, and use it as part of your application record keeping.

#### **Pastures and heavy-use areas (HUAs)**

- Remove animals before fields are saturated, then drag a harrow behind your tractor to distribute manure.
- Reseed animal lanes or HUA's with winter wheat, while there is still light and warmth to get seeds going.

#### **Facilities**

You should always have at least 12-15 inches of freeboard from the top of your lagoon or 12 inches from the top of an upright tank, to allow for a 24-hour (25-year) rain storm.

If you have more nutrients than storage this fall, work with neighbors, custom applicators, and your local conservation district to locate appropriate application locations or storage structures.

Do not direct silage leachate to the ground or water.

- Feed-bunker leachate should be collected and transferred to storage.
- Vegetated treatment areas (VTA) must be designed to treat the volume of runoff expected, and must be healthy enough to trap and absorb the nutrients carried in the runoff.
- If not designed well, concentrated runoff from the feed area can "burn" the grass and destroy these treatment areas rendering them ineffective and requiring diversion to storage.
- Conservation district planners can provide guidance on whether your VTA is adequate for preventing a water quality issue.



Move cows off pastures before they get wet.

## Small fixes now go a long way

Check your gutters and downspouts to ensure they are clean and connected.

- Did you know that an inch of rain on a 10,000 square-foot roof amounts to 6,000 gallons? If clean water isn't properly diverted, then it's being collected and is transferred to storage. Collecting clean water will fill up your lagoon and may cause you to lose sleep come March!
- Know where water flows.
- Park manure handling equipment (scrapers, manure spreaders tankers and hoses), away from surface water and storm drains.
- Avoid manure track-out, and keep manure off surfaces that may run to ditches or storm drains.

## Be prepared

To prevent a manure spill:

- Maintain a 12-inch freeboard in lagoons, plus an extra 4-6 inches to accommodate rain from a 25-year, 24-hour storm.
- Inspect storage structures regularly for signs of leaks or problems.
- Inspect valves, pumps, hoses, and other manure conveyance equipment before and during use.
- Conduct routine maintenance and repair to prevent failure.

## Have a plan!

Post emergency numbers where they can be easily seen and found in a hurry - on the wall in your office, in the milk house, and/or in the breakroom. Post the farm address including the numbers below, so callers know exactly where to direct responders.



Following best practices, a tractor incorporates manure after an application.

## Numbers to include:

- Emergency first responders - 911
- Farm managers/operators cell and home numbers
- Ecology – Spills to water 1-800-258-5990
- WSDA – To report a spill 360-746-1249
- CAFO permitted facilities-- 1-800-407-6600; call within 24 hours of the spill.

If you have questions about winter manure management, please contact your local conservation district or [Kyrre Flege](#) with WSDA's Dairy Nutrient Management Program at 360-746-1249.

## Home & Garden

## SCIENTISTS STUDY HOW WASP LEARN

Adapted from Seth Truscott, CAHNRS

On lingering warm fall days, hungry wasps are often unwelcome guests at picnics and tailgates, homing in

on hamburgers and buzzing bottles.

It's worse in parts of the southern United States, where paper wasp species swarm air traffic control towers and other tall, solitary buildings during fall mating season.

Scientists at Washington State University aim to take the sting out of these encounters. Partnering with the U.S. Department of Defense, WSU entomologists are studying wasps' ability to learn and respond to chemical signals, with the goal of building a better paper wasp trap.

## Hungry, unwanted visitors

The European paper wasp, *Polistes dominula*, gains its name from the paper it makes to build its umbrella-shaped nests, often found under eaves across North America.

While less aggressive than their yellowjacket cousins, from whom they subtly differ in appearance, paper wasps will deliver a painful sting if their nests are threatened.

Paper wasps will occasionally feed on nectar and fermenting substances, but also prey on insects as a protein source for their young. That makes human food especially attractive as summer ends and insect prey, such as aphids and caterpillars, become rare.

"They're looking for protein and sugar," said Megan Asche, a WSU Department of Entomology doctoral student. "That's why they show up at your house, zoom around your garbage can, and take a bite out of your sandwich."

Paper wasps can be hard to eliminate from homes and yards, because they're different from other wasp species.

"They're not attracted to the same things that yellowjackets and hornets are," Asche said. "We're trying to find something that works better for these animals—a better wasp trap."

## Buzzing the control tower

Funded by a five-year, \$366,000 Department of Defense grant, Asche's research is spurred by an annual wasp invasion of military airstrips in the southern U.S.

Like many flying insects, paper wasps seek a preferred place to mate. Drones look for queens at places called hill-topping sites: "Basically a really tall thing surrounded by flat, open space," Asche said.



Paper wasps gain their name from the paper they use to build nests of cells. While beneficial, paper wasps can be a nuisance and are challenging to trap; WSU scientists are exploring better ways to lure them away from homes and workplaces (Photo by Megan Asche).

## Master Gardeners

"An air control tower is exactly what wasps are looking for."

The presence of thousands of wasps in and around the tower, crawling on radar screens and personnel, makes the job of air traffic controllers much harder.

"We need to figure out what we can use to attract wasps away from the towers," Asche said.

### Can wasps learn?

To do that, she is studying wasps' ability to learn and react to chemical signals.

"Wasps are a lot more flexible in their behavior than most insects," Asche said. "They eat a lot of different foods, plants, and animals, so they're capable of adjusting to their environment and changing their routine."

In Asche's lab, wasps are put into a flight tunnel—a large see-through plastic box with electric fans on both ends. Near one end is a nozzle emitting scent, either extracted from flowers or isolated from the wasps themselves.



Paper wasps tending a growing nest. Swarming during fall mating season, wasps can pose a challenge at air traffic control towers (Photo by Megan Asche).

Wasps are released one at a time into the tunnel, and Asche carefully notes how they react to the scent.

"That's a perfect flight!" Asche remarked as one male wasp was put through the paces. He soon reacted to the odor, questing and landing near the nozzle's tip.

"I'm trying to see how quickly they can learn," she explained. "If we understand how they learn, we can teach them to associate an odor with food, and replace it with a working trap."

### Deciphering wasps' chemical signals

Asche and other WSU entomologists are also exploring the chemistry behind wasp reactions. They are isolating and identifying the compounds they use to communicate and congregate.

The team has had surprising success using synthetic lures to successfully trap and remove wasps, both in Washington state and the southern U.S.

"Paper wasps are a beneficial part of our ecology, but they don't belong in our buildings," Asche said. "For people who don't want to interact with wasps, our research could really bring peace of mind."

### WHAT'S THE DIFFERENCE BETWEEN HORSE CHESTNUTS AND SWEET CHESTNUTS?

Adapted from Erin Lizotte, MSU Extension

Chestnut is one of the world's most popular and unique nut-bearing trees. Fresh chestnuts contain vitamin C and are much lower in fat than other nuts and contain twice as much starch as a potato, earning the chestnut tree the nickname "bread tree" in some regions of the world. Chestnut acreage in the U.S. has increased substantially over the past 30 years and Michigan boasts the largest number of growers and acreage in the United States.

Chestnut trees are found naturally in the landscape, in green spaces as ornamentals and are also planted in orchards for nut production. Edible chestnut species found in Michigan include the American chestnut, Chinese chestnut, Japanese chestnut, European chestnut and chinquapin. Consumers should be aware that the term "horse chestnut" is sometimes used to describe an unrelated tree in the genera *Aesculus*; trees in this genus may also be referred to as buckeyes. Trees in the genus *Aesculus* produce toxic, inedible nuts and have been planted as ornamentals throughout the U.S. and are sometimes incorrectly represented as an edible variety.



Left, edible chestnut with spiny husk and pointed tassel on tip. Center, fleshy husk of horse chestnut. Right, rounded toxic horse chestnuts without a tassel. Photos by Erin Lizotte (left) and Virginia Rinkel (center and right).

Edible chestnuts are easy to tell apart from unrelated toxic species like horse chestnut or buckeye. Edible chestnuts belong to the genus *Castanea* and are enclosed in sharp, spine-covered burs. The toxic, inedible horse chestnuts have a fleshy, bumpy husk with a wart-covered appearance. Both horse chestnut and edible chestnuts produce a brown nut, but edible chestnuts always have a tassel or point on the nut. The toxic horse chestnut is rounded and smooth with no point or tassel.

When selecting cured chestnuts at the store or market, consumers should inspect them carefully for quality just you would inspect a banana or pear. A ripe chestnut should have a slight give when squeezed, indicating they have been properly cured.

A rock hard chestnut may require more curing time. A chestnut shell with a great deal of give indicates it is past its prime and has become dehydrated or has internal disorder. Lastly, when purchasing chestnuts, be sure the store or market is storing them in a chilled environment for maximum quality.

When you get your chestnuts home, keep them cold but do not let them freeze (Due to their sugar content, chestnuts do not freeze until 28 F or below.). Store them in the produce compartment of your refrigerator where well-cured chestnuts can last for a few weeks. Ideally, place them in a plastic bag with holes made with a fork or knife to help regulate the moisture levels. If nuts are frozen, use them immediately after thawing.

## Financial Fitness

### WAYS TO GENERATE A HOUSEHOLD PROFILE

Adapted from Teresa Clark– Jones MSU Extension



Would you be able to recall everything you owned if your home suddenly burned down or destroyed by a natural disaster? My guess is that this would be a difficult task and especially if

you are under stress. One of the most important purposes of a household inventory is to provide proof of ownership for filing insurance claims in the event of loss by fire, flood, theft or other types of disasters. On the other side, it helps you decide how much insurance protection you needed to cover your household furnishings and personal belongs.

From a financial standpoint, it is functional in planning and forecasting replacement needs for furnishings, equipment and clothing. The inventory can also indicate the money value of your possessions for development of net worth statements, which show financial growth.

A household inventory is a collection of pictures and or videos documentation of all your possessions. As part of the inventory, detailed information would be collected on the expensive items. This may include date purchased, cost, warranties, etc.

Once the household inventory is collected, it should be stored in a safe location, protected from any catastrophic destruction of your home. Consider placing the household inventory in a bank safe deposit box, fireproof home safe or a secure online data filing system.

With all the great technology available, creating your household inventory has never been easier. Most cell phones have the capability to video record your property. The most important issue is to make sure that the information recorded is downloaded to a safe place for accessibility when needed.



Record your household furnishings and personal items in a systematic way. Inventory one room at a time and record everything in the room. Do not forget to go into closets and take special pictures of the more valuable items. Open drawers and photograph/ video record contents of each drawer. Lastly, record storage areas such as the basement, garage, attic, and storage units. These areas need to be recorded in the same way as the interior rooms of your house. Take pictures of the whole area and open doors to cupboards, closets or storage chests.

When it comes to prize possessions, take extra care in documenting jewelry, paintings, special collections and other valuables. Group small pieces of similar items together and place on a solid-colored rug or cloth. Document the brand name and if the item is extremely valuable, include a member of the family in the picture as proof that the items are really yours.

Once the household inventory had been established, it needs to be updated at least annually. When updating consider the following tips:

- Major purchases need to be added to the inventory immediately
- Small items should be done annually
- Items that you no longer have should be purged from the inventory



WASHINGTON STATE UNIVERSITY  
WALLA WALLA COUNTY EXTENSION

Celebrating 100 Years of Extending Knowledge  
and Changing Lives.

*Debbie M. Williams*

Debbie M. Williams  
County Extension Director

Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your local Extension office.