CFAES

OHIO STATE UNIVERSITY EXTENSION

Jefferson County

Cooperative CONNECTION

Covering county news and events for Extension programs, including Agriculture & Natural Resources and 4-H Youth Development



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Letter from the Editors



Dear Readers,

Here is the last issue of 2020! We hope that you are enjoying the start to the holiday season. Needless to say, it's been a busy year, although not in the way we initially anticipated.

Heading into the winter season, we have a lot planned...there are even a few in-person events scheduled! (Although space will be limited at all in-person events) As we head into 2021, those who are needing their pesticide licenses recertified will have several options this year to complete the recertification training, including in-person training events, live webinars and the work-at-your-own-pace online course. For those whose licenses expired this year, as a general reminder you have until December 1st to complete the recertification training and submit the license renewal application with the license fee to recertify. This December 1st deadline is only for 2020 applicators. Anyone needing to recertify in 2021 and beyond should expect the usual deadline of March 31st to recertify.

Many of you have already heard that live spotted lanternfly adults were found in Jefferson County this October. We ask that anyone who runs into adults or egg masses this winter season report those sightings to the Ohio Department of Agriculture at 614-728-6400 or use the Great Lakes Early Detection Network App. A big thanks out to those who have been reporting!

We would also like to thank 4-Her's participating in the first pumpkin carving contest - we saw a lot of great artistic talent! A list of winners and photos of a few of the contenders can be found on page 17. Leslie has also made available a full list of activities during the holidays for cloverbuds.

As a general reminder - when planning to visit the office during appointment hours, please come prepared and follow social distancing guidelines. We are requiring anyone entering the office to wear a mask - if you do not have a mask, one will be provided. We are also offering curbside assistance or can meet you on the main floor of the building - just call when you arrive during appointment hours and someone will be down to meet you. Remember - if you feel sick, stay home!

The Jefferson County Extension office will be closed for Thanksgiving and Christmas. For a calendar of public events and dates our office is closed for the holidays, see page 9. For county Extension updates, stay tuned at jefferson.osu.edu or follow us on Facebook.

Stay well this holiday season, and have a great Thanksgiving!

ANGIE ALLISON
4-H Youth Development

ERIKA LYON
Agriculture & Natural Resources



IS THIS A YEAR TO HOLD CALVES?

By Dr. Jeff Lehmkuhler, Associate Extension Professor, University of Kentucky

This fall has provided us with another dry spell. The recent hurricane provided small amounts of precipitation to the Commonwealth, but much less than originally forecasted. Randomly selecting county Mesonet sites across the state for the month shows precipitation levels of 0 to 1 inch. Even with the dry conditions, we are much better off than the Western and Plains states (see figure below). Dry conditions appear to be forcing producers in the west to sell calves. Last week, Nebraska feeder cattle marketed were reported at 28,584 compared to 15,475 the week before. Colorado had similar increases selling 11,903 feeders compared to 6,660 the prior week. Wyoming another state hit hard by the dry conditions followed the same pattern moving 12,198 feeders this past week compared to 7,673 the previous week. It is not clear if this is strictly due to the dry conditions, the seasonal marketing pattern of spring calving herds or a combination of the two. Yet, when looking at the feeder cattle marketings for Arkansas, Georgia and South Carolina, states in the green vegetation index area, numbers were steady showing no large increases from the previous week.

With the August cattle feedlot placements being above a year ago, drought conditions increasing cattle marketings and concerns over wheat pasture conditions, it would not be unexpected to see these factors impact fall feeder prices here in the southeast. I am not an economist so be sure to follow the markets and Dr. Burdine's market updates as wells other industry news as we move through the fall to make informed marketing decisions. Current situations may mean backgrounding calves this fall, if you have forage, could provide an opportunity to add weight and value to the calf crop.

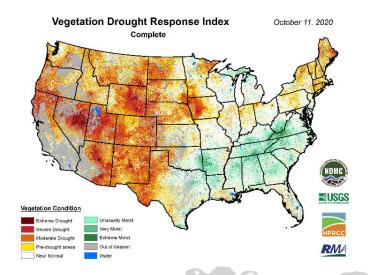
For operations that have sufficient forage, pasture or stored forages, backgrounding calves post-weaning can increase calf values by adding weight and applying some basic management. Administering a preventative herd health protocol to calves will provide the opportunity to boost immunity before marketing and reduce the internal parasite burden. Feedlot closeout data reveals cattle entering the feedyard at heavier weights are less likely to get sick and mortality rates are lower. Backgrounding calves for a few months allows them to develop a stronger immune system following the stress of weaning.

Assembling calves that are similar in frame, weight, and coat color to make larger marketing lots adds value. Multiple marketing studies demonstrate as the number of head sold in a lot increases, buyers tend to pay more than for calves sold as singles or small lots (<5 head). If you have ample forage, this may be an opportunity to purchase calves to match your weaned calves to background and put together larger lot sizes.

There are several feeding strategies that one can consider for backgrounding calves. The key is that the diets provide the cattle with their required nutrients for the targeted rates of gains. Work with a nutritionist to develop a feeding program that will meet the nutritional needs and keep feed costs low. A backgrounding program should add frame, muscling and little fat. Overly fleshy calves will be discounted at marketing time. Consider implanting calves to shift more nutrients to lean gain and promote efficiency. Daily gain targets will depend on frame and muscle scores as well as sex of the calves. Large-framed steers could be targeted at 2.7-2.8 pound per day gains while heifers would likely need to be 2.5-2.7. Medium framed calves should gain a bit slower to avoid getting them fleshy. Calves that are going to be held for a short feeding period can have higher daily gains than calves that are to be sold four to five months later. Feeding calves for 150 days at a rate of 2.8 pounds will result in excessively conditioned calves. Again, these are generalities and you need to evaluate the calves your feeding to determine the best target gain to avoid getting them over conditioned.

Often when backgrounding calves for short periods of time, 1-2 months, a diet will consist of 60-70% grain mix and 30-40% forage to provide the energy density needed to add weight and value to calves. As an example, a four-weight feeder calf may have a dry matter intake of 10-12 pounds per day. The grain mix offered daily would be 4-9 pounds and the balance forage. The level of grain will depend on the forage quality and targeted rate of gain. You can add weight to calves without grain allowing them to graze stockpiled forage or annual forages in the fall as well. The better quality the forages, the better the gains will be with most forages allowing 1-2 pounds per day without supplementation. Calves can also be managed on corn crop residues or stored hay with supplementation. The lower quality forage will not support high rates of gain, 0.5-0.7 lb/d, but these lower rates of gain can still be economical if the markets are trending upward. Be sure you are meeting the protein needs of the calves when grazing low quality forages and energy supplementation can be considered to increase daily gains.

Be sure to work through enterprise budgets and evaluate the profit potential. The value of gain and feed cost of gain needs to provide an opportunity to reach your profit targets. Consider your options for economic risk management as well to limit downside risk. Reach out to your county extension agent for more information on backgrounding beef cattle.



Source: https://droughtmonitor.unl.edu/ ConditionsOutlooks/CurrentConditions.aspx

ONLINE MORTALITY COMPOSTING CERTIFICATION By Amanda Douridas, OSU Extension, Champaign County

Composting livestock mortalities can be an efficient and inexpensive method of disposing of on-farm mortalities. Rendering facilities are becoming harder to come by and so are landfills that accept mortalities. Transportation costs are increasing as well. Composting offers a year-round alternative that may be more cost effective than other disposal methods. Once the compost cycle is complete, the finished product can be land applied to the farm's fields as a nutrient resource.

To start composting livestock mortalities, one must complete a certification course taught by OSU Extension. This course teaches producers how to properly compost mortalities. It covers topics like where to place the compost site, how large of an area is needed, how to manage a pile to compost completely and efficiently, and the economics of composting mortalities compared to other disposal methods.

In the past, the only option for certification was to attend an in-person course that usually lasted around 2 hours. This worked well for the initial surge of participants when it was created over 20 years ago. But, now that many have become certified (over 4,400), the trainings are becoming more infrequent throughout the state. These courses are still available but are offered on an as needed basis, so producers may need to wait a few months before one is offered in the state, especially in light of the COVID-19 pandemic.

Online Course: Due to the sporadic demand for this course, and the challenges for doing it in-person considering the pandemic environment, we have created an online course that Ohio farmers are able take when they have time and at a pace that is right for them. The same material is covered and a short quiz is used to test their understanding of the composting process.

To enroll in the online course, participants go to http://campus.extension.
org and search "Mortality Composting." The course will come up with Amanda Douridas listed as the teacher and is found towards the bottom of the page. The course fee is \$17 and can be paid online at the time of enrollment.

Once enrolled, students can begin watching the lessons. There are 8 lessons that match the 8 chapters in the Mortality Composting manual. The total time needed to view all 8 lessons is 3 hours. The lessons can be view in one sitting or spread out over several days. Each lesson is a PowerPoint presentation with the presenter's voice recorded over it.

Once participants have viewed all of the lessons and feel comfortable with the material, they will be required to achieve an 80% score on the 25-question, multiple choice quiz. Participants have three opportunities to pass the quiz. A 24-hour window between attempts allows for ample time to review the materials. Questions are randomly chosen from a bank of 70 questions so some variation in each quiz attempt will occur. Upon passing the quiz, a certificate will be created with the student's name on it. This should be printed and kept for proof of successful completion.

The online mortality composting certification course is a convenient way for Ohio farmers to learn how to properly compost mortalities in an efficient, economical and sustainable way.



Mortality composting pile showing large bones during the composting process.
Leachate runoff goes into a containment or treatment area.



STALK ROTS SHOWING UP IN SOME CORN FIELDS

By Pierce Paul, Professor, Cereal PathologyExtension

Corn harvest is progressing very slowly across the state as the crop is taking unusually long to dry down this year. The longer the crop stays in the field, there greater the risk of late-season diseases such as ear and stalk rots, especially if it continues to rain. Stalk rot often refers to a combination of several interrelated problems, including stalk breakage, stalk lodging, premature plant death, and root lodging. Several factors may contribute to stalk rot, including extreme weather conditions, inadequate fertilization, problems with nutrient uptake, insects, and diseases. For instance, when leaves above the ear are severely damaged (either by diseases, insects, or some environmental stress) well before grain-fill is complete, the plants often translocate sugars from the stalk to fill grain, causing them to become weak and predisposed to fungal infection. A number of fungal pathogens cause stalk rot, but the three most important in Ohio are Gibberella, Collectotrichum (anthracnose), and Fusarium.

Losses due to stalk rot vary from field to field and from one hybrid to another. Stalk rots may cause lodging, especially if the affected crop is not harvested promptly. However, it is not uncommon to walk corn fields where nearly every plant is upright yet nearly every plant is also showing stalk rot symptoms. Many hybrids have excellent rind strength, which contributes to plant standability even when the internal plant tissue has rotted or started to rot. However, strong rinds will not prevent lodging if harvest is delayed and the crop is subjected to weathering, e.g. strong winds and heavy rains.

A symptom common to all stalk rots is the deterioration of the inner stalk tissues so that one or more of the inner nodes can easily be compressed when squeezed between thumb and finger. It is possible by using this "squeeze test" to assess potential lodging. The "push" test is another way to predict lodging. Push the stalks at the ear level, 6 to 8 inches from the vertical. If the stalk breaks between the ear and the lowest node, stalk rot is usually present. To minimize stalk rot damage, harvest promptly after physiological maturity, even if you have to do so at a slightly higher moisture content (moisture in the lower 20s). Harvest delays will increase the risk of stalk lodging and grain yield losses, and slowdown the harvest operation. In addition, lodging may lead to ear rots and grain contamination with mycotoxins as ears come into contact with the soil and crop residue.

COURT OF APPEALS CONFIRMS DECISION NOT TO ALLOW WEDDINGS ON HAY FARM AS "AGROTOURISM"

By Peggy Kirk Hall, Associate Professor, Agriculture & Resource Law

When does the business of hosting weddings on a farm qualify as "agritourism" under Ohio law? That was the question faced by Ohio's Second District Court of Appeals in a legal battle between Caesarscreek Township and the owners of a farm property in Greene County. The answer to the question is important because local zoning can't prohibit the hosting of weddings and similar events if they fall under Ohio's definition of "agritourism." Those that don't qualify as "agritourism" are subject to local zoning prohibitions and regulations. According to the court's recent decision, the determination depends largely upon the facts of the situation, but merely taking place on an agricultural property does not automatically qualify a wedding or event as "agritourism."

The case regards the Lusardis, who own a 13.5 acre property in Caesarscreek Township containing a pole barn and outbuilding, a one-acre pond, several acres of woods, and an eight acre hayfield on which the Lusardis had produced hay for several years. Their plan was to offer corn mazes, hayrides and celebratory events like weddings and receptions on the property. To do so, the Lusardis had to demonstrate to the township's Board of Zoning Appeals (BZA) that their activities fit within Ohio's definition of "agritourism" and thus must be allowed according to Ohio law. That definition in ORC 901.80 states:

"Agritourism means an agriculturally related educational, entertainment, historical, cultural, or recreational activity, including you-pick operations or farm markets, conducted on a farm that allows or invites members of the general public to observe, participate in or enjoy that activity."

In applying the definition of agritourism to its local zoning, Caesarscreek Township requires an agritourism provider to explain how the "educational, entertainment, historical, cultural or recreational" activities it plans to offer are "agriculturally related" to the property and the surrounding agricultural community. In their agritourism application with the township, the Lusardis explained that guests could use the property to celebrate an agriculturally themed event, enjoy the scenery, hay fields and woods, learn about plants and wildlife, have bonfires, play corn hole, fish, and get married outside, in the woods, or in the hayfield. The township zoning inspector, however, testified to the BZA that he did not see a relationship between weddings and receptions and the Lusardi property itself. A wedding or reception would not have a "basic relationship" to the existing agricultural use of the property or the surrounding area and the agricultural use of the property was incidental, at best, to the wedding and reception business, argued the zoning inspector.

The township BZA agreed with the zoning inspector. It determined that the Lusardi's corn maze and hayride activities qualified as agritourism, but held that any celebratory events such as weddings would not be "agriculturally related" to the property and thus did not fit within the definition of agritourism and could not take place on the property. The Lusardis appealed the BZA's decision to the Greene County Court of Common Pleas, whose duty under Ohio law was to determine

whether the BZA's conclusion was "unconstitutional, illegal, arbitrary, capricious, unreasonable or unsupported by the preponderance of substantial, reliable, and probative evidence on the whole record." The common pleas court found the BZA's conclusion reasonable and upheld the decision. The BZA's determination that weddings don't bear a general relevance to agriculture was understandable, whereas corn mazes and hay rides do bear a reasonable relationship to agriculture, the court stated.

The Lusardis appealed the common pleas court decision to the Ohio Court of Appeals. Its duty in reviewing the case was to determine whether the common pleas court had abused its discretion by making a judgment on a question of law that is "unreasonable, arbitrary or unconscionable." The appellate court concluded that the common pleas court had not abused its discretion by affirming the BZA decision. Agreeing that it was reasonable for the BZA to conclude that the celebratory events were not sufficiently related to the agricultural property, the court stated that "just because an activity is on agricultural property does not make it "agritourism" and is not, by itself, enough to make the activity "agriculturally related."

The "what does 'agriculturally related' mean?" question is one we've pondered since the Ohio legislature created the definition of agritourism in 2016. An important rule to draw from this case is that the answer must be made on a case-by-case basis. The Lusardis asked the court of appeals to decide whether any celebratory event on an agricultural property would be agriculturally related and would therefore constitute "agritourism" as a matter of law, but the court refused to do so. "Whether a particular activity constitutes "agritourism" is an issue that shades to gray quite quickly," stated the court. "Given the great variety of factual situations, we decline to rule on whether celebratory events constitute "agritourism" as a matter of law."

Also noteworthy is the court's attention to the BZA's analysis of the activities that were to take place on the Lusardi property. The BZA pointed to a lack of evidence that any crops or flowers grown on the property would be used in the events. Also remiss was evidence that the only agricultural crop grown on the property—hay—was somehow connected to the celebratory events that would take place. The court observed that these evidentiary flaws supported the BZA's conclusion that the Lusardis were proposing an event venue with an incidental theme rather than an agricultural activity with an incidental event.

Wedding barn issues have been a cause of controversy in recent years. The Lusardi v. Caesarscreek Township decision follows an Ohio Supreme Court case earlier this year regarding whether a wedding barn fit within the agricultural exemption from zoning for buildings and structures used "primarily for vinting and selling wine." In that case, the Supreme Court determined that making and selling wine was the primary use of the barn and that weddings and events were incidental, yet were related to the production because event guests had to purchase the wine produced at the farm. Taken together, these cases illustrate the importance Ohio's agricultural zoning exemption places on production activities. Where agricultural goods are being produced and sold, additional incidental activities such as celebratory events that are related to agricultural production will likely fall under the agricultural exemption. But as the Lusardi case illustrates, local zoning may prohibit celebratory events that don't have a clear connection to agricultural production and instead appear to be the primary rather than incidental use of the property.

Want more ag law information? Visit <u>farmoffice.osu.edu</u>. Read the case of Lusardi v. Caesarscreek Township Board of Zoning Appeals <u>here</u>.

Spotted lanternfly adults are slowing down at this time of year, but egg masses will be present winter-long...Help us spot spotted lanternfly! Contact the Ohio Department of Agriculture at 614-728-6201 or use the Great Lakes Detection Network App to report sightings of this insect!



INTELLIGENT SPRAYER REDUCES PESTICIDE USE AND SAVES MONEY!

By Thomas DeHaas, OSU Extension, Lake County

The cost of pesticides can be one of the single largest expenses to a commercial nursery. By using the technology of a "Smart Sprayer", a company can reduce pesticide use and save money without a reduction in pest control.

The technology was developed by OSU and USDA. The intelligent sprayer development arose from a collaboration between Ohio State researchers and the USDA-Agricultural Research Service. It was led by Heping Zhu, an Ohio State adjunct professor and USDA agricultural engineer.

go.osu.edu/2020intelligentsprayer

A local nursery purchased a "Smart Sprayer" and was one of the first in Lake County to use a prototype developed by Heping Zhu and his team.



The sprayer uses a Pak Blast Sprayer mounted on the back of a tractor using a 3 point hitch and uses a Smart Guided Systems controller to detect foliage and articulate spray nozzles to apply product to plant tissue.

Keeping the Laser clean has always been a challenge. Smart Guided Systems use a filtration system to keep the laser clean. The laser sees the plant foliage and sends a signal to the control module which opens and closes solenoids to trigger nozzles to release pesticides.

The goal of the technology is to save money, reduce pesticide use, which should help to pay for the cost of the sprayer in savings. The use is a winwin for the nursery and the environment.



Figure 2: Smart Guided Systems controller



Figure 3: Filtration system



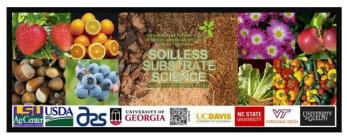
Figure 4: Laser



Figure 5: Solenoids



Figure 6: Sprayer nozzles



IMPROVING SUCCESS WITH SOIL-LESS ROOTING MEDIA

Researchers representing the USDA and six universities are spearheading an effort to improve both soil-less rooting media used in specialty crop and transplant production and peoples' success using soil-less media. Their research focuses on grower concerns and their extension/outreach will include a North American Soilless Substrate Summit. The team's work is supported by the USDA Specialty Crop Research Initiative (Grant # 2020-02629). Learn more about it by contacting Dr. James Owen in Wooster, OH (jim.owen@usda.gov; 757-374-8153) or Dr. Jeb Fields (jsfields@agcenter.lsu. edu; 985-543-4125). Just as important, help steer the team's research by completing a 5-minute survey at https://bit.ly/2ZLNlkn.

HOW CAN I CONTROL ROBINS IN THE VINEYARD?

This question comes from an Ohio grape grower who has been struggling to keep robins away from his grapes. Members of the IPM Great Lakes Fruit Workers Group (GLFW) provided the response to this question.

Robins, starlings and grackles are probably the most common bird pests in Ohio vineyards. There are several strategies that can be used to deter birds. Netting, visual or auditory scare devices, chemical deterrents, lasers, and birds of prey (such as falcons) are some of the options available to growers.

The most consistently effective method to keep birds from pecking the berries is bird netting. However, net installation and removal can be a large undertaking, and is costly.

Scare devices such as mylar tape, cannons or distress calls can provide short term bird control. Air dancers, such as those used by car dealerships to attract attention to their sales lot, are a newly tested scare tactic that have been shown to be effective on small fruit farms in New York state. Moving the scare devices around the vineyard every two weeks is recommended as birds will soon learn that these tactics won't hurt them!

The use of lasers and drones to deter birds in the vineyard are in their infancy. Both methods mimic predator movement and induce anti-predator avoidance responses in the bird. Wine grape growers in California, Washington, Canada and Australia have reported decreased losses using lasers and growers in Australia are finding success with drones. Drones and lasers are expensive and may not be cost effective for small- to medium scale vineyards.

The chemical deterrent methyl anthranilate (active ingredient in Avian Control) is another tactic that can be used in the vineyard to deter birds. Methyl anthranilate is a food additive that tastes bad to birds but does not harm them. Methyl anthranilate should be applied every 6-8 days or after a rain event. Similar to the scare tactics success using methyl anthranilate has been inconsistent.

THE FUNGI THAT SIGNAL TREE HAZARDS

By Erika Lyon, OSU Extension, Jefferson & Harrison Counties

Homeowners often have the question, "when should I consider taking a tree down if it is located close to my home?" While the answer often depends on the situation, there are a few tell-tale signs that let us know when it is indeed time for a tree to come down, especially when certain fungi are involved.

It is important for homeowners to understand that when the fruiting body of a fungus appears, it often signals the final stage in the structural weakening of a tree.

Initial infection of a tree by a fungus occurs well before this point. A spore lands in a spot under optimal conditions and germinates - usually a wound in the tree is the primary point of access. Once it germinates, it produces filamentous structures called hyphae that grow well within the woody tissues. Digestive enzymes produced by fungi at this point begin to break down cellulose and woody fibers important to maintaining the structure of the tree.

Once much of the material is digested and the fungus has fully colonized the wood, this is when a mushroom, or the fruiting body of the fungus, is produced. For some fungi such as the weeping conk that attacks oak trees, once this stage is observed the tree needs to come down immediately as it's not a matter of if it will come down but when (and it will happen soon). By this point, a homeowner may begin to notice branches becoming more brittle, breaking more frequently during windy conditions. If a type of root rot is involved, the entire tree may come down.

Here are few of the mushrooms or conks found when tree has become а hazard for home:



Weeping Conk. Photo by Erika Lyon.



Armillaria Root Rots. Photo by Joseph OBrien, USDA Forest Service, Bugwood.org.



Sulfur Shelf. Photo by Manfred Mielke, USDA Forest Service, Bugwood.org.

Other symptoms of a tree with lost structural integrity include slowed growth, branch dieback, smaller than normal leaves, excess seed production, autumn coloration during the spring or summer, etc. At this point, consider hiring an arborist. Visit the "How to Hire an Arborist" fact sheet to learn more about selecting a good company.



OHIO HOP INDUSTRY AND RESEARCH UPDATE

By By Brad Bergefurd, Melanie Ivey, Steve Cullman, Thom Harker, Anna Adams, Wayne Lewis, and Becky Colon- OSU Hop Research and Education Team

Since The Ohio State University South Centers began hops research and educational programming in 2012, more than 200 Ohio farmers have become attracted to hop growing because of the continued high market demand for Ohio-grown hops from the local craft brewing industry and the high-income opportunity that hops offer to small acreage landowners.

To advocate for, and educate, the state's hop farmers, more than 100 growers have joined the Ohio Hop Growers Guild, which conducts educational programming, hop analysis workshops, and annual educational farm tours of Ohio hop farms. They conducted the annual Ohio Hops Conference in Springfield in February, when more than 100 attended the two day, inperson event. Several university hop researchers from Ohio and Michigan and hop farmers presented updates on integrated pest and crop management, marketing, processing, and safe handling practices.

OSU conducted a series of virtual hop-growing trainings in March, and three virtual hop field days and one face-to-face field day (sponsored by the Agricultural Incubator Foundation) were conducted in August. Several county-based hops programs were taught virtually throughout the state in 2020.

Bergefurd and the other members of the OSU Hop Research and Education Team have been conducting field research on hops since 2013. Current OSU hop field research includes a fertility and nutrition management study being conducted by Dr. Steve Cullman and Brad Bergefurd. In addition, Dr. Melanie

Ivey and Bergefurd are conducting a hops downy mildew management study. The three hop variety trials at Piketon, Wooster, and Bowling Green locations also continue.

Hop quality is normally verified using laboratory wet chemistry methods that require reagents such as toluene, but these methods can be time-consuming and affect the cycle time of a facility. Due to the importance of harvest timing, and to ensure a high-quality crop for brewers, the research partnership between The Ohio State University and the international, Ohio-based company Eurofins QTA (a subsidiary of Eurofins Scientific) continues to research technology that provides a method of hop analysis that has been adopted by most west coast hop farms. This new technology allows for hops to be tested for multiple parameters, such as alpha and beta acids, in 60 seconds using the latest in infrared technology; this is in stark contrast to the current practice that takes three total days to collect, mail, and test hops in a laboratory setting. This enhanced hop quality analytics equipment and procedures allow farmers to determine prime harvest times quicker, and this can lead to increased hop quality for brewers.

This new hop analysis technology is housed in the hop and small fruit quality analysis lab at the OSU South Centers in Piketon. Test data from quality analytics of hops harvested from the OSU hop research yards, Ohio farmer-cooperator hop yards, and west coast hop yards indicates this new technology provides similar results to the current laboratory hop testing procedures within minutes instead of days.

The 2020 season brought about new issues and problems faced by growers and researchers; however, with the seasons harvest beginning to wind down, the overall yield, quality, and demand being reported by growers is some of the best we have had since 2013. Ohio experienced a late season (early May) freeze and frost, which set back some plantings. Possible disease and virus samples have been submitted to Dr. Ivey's lab for positive diagnosis. Those growers who have ramped up their disease control program and spray schedules are reporting better disease control and higher yields.

Since The Ohio State University South Centers began hops research and educational programming in 2012, more than 200 Ohio farmers have become attracted to hop growing because of the continued high market demand for Ohio-grown hops from the local craft brewing industry and the high-income opportunity that hops offer to small acreage landowners.

By all accounts, the 2020 season was a positive one for Ohio hop farmers. Although brewers' retail establishments were closed due to COVID, beer sales continued and the demand for Ohio beers and hops continues to grow. So long as the brewing industry keeps pouring, bottling, and canning craft ale, the future is bright for Ohio-grown hops.



SEASON CALENDAR

NOVEMBER

HOTE	WER
11/5	Dairy Miniseries 12PM via Zoom
11/9-13	Agricultural Policy & Outlook Conference 12PM
11/13	Spotting the Spot 10AM - woodlandstewards.osu.edu
11/17	Dairy Miniseries 12PM via Zoom
11/20	Timber Rattlesnake Ecology & Conservation 10AM
	woodlandstewards.osu.edu
11/24	Dairy Miniseries 12PM via Zoom
11/26-27	Office Closed for Thanksgiving
11/27	Cattlemen's Replacement Female Sale @ Muskingum
	Livestock Facility, 6PM

*Some dates may change - if you plan to attend a live session, check the website for confirmation of the schedule and register in advanced for webinars.

Visit <u>jefferson.osu.edu</u> or join the Agriculture & Natural Resources Group on our Facebook page @JeffCoExtension for updates and future webinars, podcasts and other great opportunities!

MARK YOUR CALENDARS!

DECEMBER

12/1	Cattlemen's Academy Beef Nutrition Clinic @
	Harrison County Fairgrounds, 6PM
12/4	Buckeye Shepherd's Symposium 2PM via Zoom

12/24-25 Office Closed for Christmas

Office Closed for New Years

JANUARY

1/1

1/7

1/13	Horticulture Happy Hour 4PM via Zoom
1/14	East OH Women in Ag Tax Law & Recordkeeping
	webinar 12PM via Zoom
1/21	Horticulture Lunch & Learn 12PM via Zoom
1/22	Friday Farm Coffee Break @ jefferson.osu.edu 10AM
1/26	2021 Cow Calf Outlook Webinar 6:30PM
1/27	2021 Cow Calf Management School, Location TBA,
	9AM-3PM
1/27	Horticulture Hanny Hour 4PM via 700m

Horticulture Lunch & Learn 12PM via Zoom

1/27 Horticulture Happy Hour 4PM via Zoom

1/28 2021 Cow Calf Management School, Location TBA, 9AM-3PM

1/28 East OH Women in Ag Cast Iron Cooking webinar 12PM

EXTENSION'S MOST WANTED

SPOTTED LANTERNFLY

REYNOLDSBURG, OH (Oct. 27, 2020) – A population of the invasive Spotted Lanternfly (SLF) has been found in Mingo Junction just south of Steubenville, along the Ohio River. The initial report came from a resident who spotted a dead adult SLF on a commercial building on October 19, 2020. When Ohio Department of Agriculture (ODA) Plant Pest Control inspectors arrived, they were able to capture five live adult SLF in trees located nearby.

ODA has been working with the United States Department of Agriculture, Ohio Department of Natural Resources, Ohio State University Extension, and the Ohio Grape Industries Committee to do visual surveys, insect trapping, and outreach in the region.

SLF is a great concern to the grape and wine industry. The insect is fond of grapevines, fruit trees, hops, blueberry, oak, pine, poplar, and walnut. Adult SLF are attracted to the invasive Ailanthus tree, also known as tree-of-heaven, while nymphs feed on a wide range of hosts. Both adults and nymphs feed on stems and leaves, causing sap bleeding and reduced photosynthesis, which can eventually kill the plant.

Now through November is the best time to spot the SLF because it is in its most recognizable stages as a colorful winged adult plant hopper. After hatching in the late spring, the SLF goes through four nymph stages. By midsummer, the nymph SLF can be identified by its red body, roughly a half-inch in size, with black stripes and white dots. During the late summer until roughly November, the SLF is in the adult stage. These adults are larger, roughly one inch in size, with black bodies and brightly colored wings.

The public is the first line of defense against the SLF. If you believe you have seen an SLF in your area, you can easily report a suspected infestation by going to ODA's Spotted Lanternfly Information Page and filling out a suspected infestation report. You may also call the Plant Pest Control Division at 614-728-6400.





Spotted lanternfly egg masses are present throughout the winter and early spring months when an infestation is present. Photo by Emelie Swackhamer, Penn State University, Bugwood.org.

Jefferson County Extension



November 5 How did we get to a -\$8 PPD?



Mark Stephenson
Director of Dairy Policy
Analysis,
University of Wisconsin

November 17 Dairy Fundamental Outlook and Trade



Mike McCully
The McCully Group, LLC

November 24
Dairy Risk Management Tools
for Producers





William Loux
Director of Global Trade
Analysis,
Dairy Export Council



Christopher Zoller Educator, OSU Extension, Tuscarawas County



Jason Hartschuh
Educator, OSU Extension,
Crawford County



OHIO DAIRY PRODUCERS ASSOCIATION

Details about all three sessions and free registration at go.osu.edu/dairyriskmanagement



The Agricultural Policy and Outlook Conference is the premier forum related to Ohio's Agricultural and Food Industry. The virtual 2020 conference is spread out over four days and loaded with experts covering issues important to producers, agribusinesses, and elected officials. Each day features a unique topic: Monday, Nov. 9- Agricultural Finance Conditions and Outlook, Tuesday, Nov. 10- Agricultural and Environmental Policy, Thursday, Nov. 12- Trade and Macroeconomic Outlooks, and Friday, Nov. 13 - Commodity and Consumer Demand Outlooks.

Come join the discussion and be apart of the conversation.

November 9th, 10th, 12th and 13th; Everyday from 12:00- 2:00 EST

Location: Zoom Webinar Cost: Free to Attend

Registration at: go.osu.edu/aedeoutlook

Contact information: Ben Brown at brown.6888@osu.edu or 660-492-7574

Kelli Trinoskey at trinoskey.1@osu.edu or 614-688-1323

Check out our new show! Taking Root in Ohio Valley Agriculture

Airs on SCS-TV Comcast Channel 15 in Jefferson County

Each episode covers topics of interest for eastern Ohio agriculture, including interviews with growers, producers and gardeners as well as informational segments on tree identification, forestry, soils, gardening and more!

Missed an episode? We will be posting episodes on our Facebook page (@JeffCoExtension) and website (go.osu.edu/takingroot)



SCS-TV is a product of the Steubenville City Schools' multimedia program. We greatly appreciate their support!



MASTER GARDENER

VOLUNTEERS

HORTICULTURE

LUNCH & LEARN and HAPPY HOUR

WEBINARS



Back again starting this January and open to the public! Topics TBA

mastergardener.osu.edu

Lunch & Learns 12-1 PM

Thursday, January 7th Thursday, January 21st Wednesday, February 4th Wednesday, February 18th Happy Hours 4-5 PM

Wednesday, January 13th Wednesday, January 27th Wednesday, February 10th Wednesday, February 24th

PESTICIDE EXAM INFORMATION

Due to current COVID-19 restrictions, pesticide and fertilizer exams will only be given at the Ohio Department of Agriculture Bromfield Administration Building in Reynoldsburg. The following are required when taking the exam:

3-hour testing sessions will be scheduled on Tuesdays, Wednesdays and Thursdays.

9 am exam – No Building Entry Until 8:45 am 1 pm exam – No Building Entry Until 12:45 pm

Preregistration is required. No walk-ins will be permitted.

Face masks are required and must be worn at all times.

Masks are available at the security desk if needed.

Photo IDs will be required.

Pencils and calculators will be provided.

No more than 9 people will be allowed per session, plus a proctor.

Per OAC 901:5-11-08(A)(7), applicants must wait five (5) business days between testing sessions.

Multiple exams may be taken during a session, however, due to limited space, you may only register for one session per week.

Register for exams at

pested.osu.edu/PrivateApplicator/testing

**Keep in mind exam sessions may be booked out over 2 months in advance.

Look for County Study
Sessions in the next newsletter

Tri-State Green Industry Virtual Conference

SAVE THE DATE Thursday, February 4, 2021

It's Virtual: After 80+ years of holding a premier annual face-to-face training event, it will now be the 2021 Tri-State Green Industry virtual Conference (GIvC). We will be using the Zoom platform.

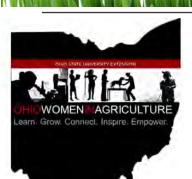
Different Delivery, Same Value:

- We'll still offer a multi-track program providing cuttingedge horticultural training sessions to keep you and your company updated and informed!
- Ohio Department of Agriculture Pesticide Applicator CEUs
- International Society of Arboriculture (ISA) Credential CEUs

Coming Soon:

More program details

Online registration information



East Ohio Women in Agriculture

Upcoming Events & Webinars

Recordings Now Available - Kitchen Table Conversations

- Women & Land Ownership available at go.osu.edu/wiawomenandland
- Planning for the Family's Future available at go.osu.edu/wiafutureplan
- Chores for Farm Children available at go.osu.edu/wiachores

Upcoming Webinars (subject to change)

- January 14, 2021 Tax Law & Recordkeeping
- January 28, 2021 Cast Iron Cooking



Learn at your own pace about a few of the easiest-to-cultivate gourmet species, including shiitakes, oysters and wine caps - whether grown at home or for commercial production!

Registration now open - visit https://ciaesosu.catalog.instructure.com to access the course registration and to view other available online courses.

NO COURSE FEE FOR 2020

Course ends
December 31st, 2020

Buckeye Shepherd's Symposium

Friday, Dec. 4, 2020 2:00-5:00 p.m. Zoom Webinar

Event Topics

Feed Processing, Digestive Upset, and Observations During Feeding

Dr. Francis Fluharty- Animal Science Professor and Department Head, University of Georgia

Ohio State Fair Inside Look at Lamb Carcass Evaluation Tim Barnes- OSU Extension, Ohio Ag Net, Ohio Country Journal, & Studio 149

Feeding Wet Forages- Considerations for Sheep Garth Ruff- OSU Extension Beef Cattle Field Specialist Ohio State University Sheep Research Video Update Brady Campbell- Ph.D. Student | Program Coordinator & Christine Gelley- OSU Extension

Minerals and Vitamins for the Ewe Flock
Dr. Francis Fluharty- Animal Science Professor and Department
Head, University of Georgia



Additional Events Following OSIA Annual Meeting and Election Virtual Shepherds' Social Hour

Register online for no cost to receive the webinar connection information through email.

go.osu.edu/ohiosheep



Save the Date! 2021 Ohio Cow – Calf Management Schools IN-PERSON

9:00 a.m. - 3:00 p.m.

January 27 and February 10 – Columbiana County January 28 and February 11 – Noble County

Space will be limited.

More Information Coming Soon!

Visit u.osu.edu/beefteam/events-programs

Winter Cattle Events

November 27th, 2020, 6 PM @ Muskingum Livestock Facility: **Ohio Cattlemen's Replacement Female Sale**; contact John Grimes at 937-763-6000 for more information

December 1st, 2020, 6 PM @ Harrison County Fairgrounds Commercial Building: **Cattlemen's Academy** - **Beef Cattle Nutrition Clinic**, Cadiz, OH; Topics include forage quality, mineral and protein supplementation programs and a 12-month look at cow nutrition needs; contact Alex Ryan at 614-873-6736; Cattlemen's Academy clinics are free for OCA members to attend. Those who are not current OCA members may still attend but must pay \$75 per family upon registration. This cost includes clinic attendance and an OCA membership. A meal is included for each participant at each of the clinics, sponsored by Merck Animal Health. Attendance at each clinic is limited. Producers should register early, or risk missing out on the chance to take part in this unique learning opportunity for their operations.

January 26th, 2020, 6:30 PM: **2021 Cow Calf Outlook Meeting** with Dr. Kenny Burdine, University of Kentucky Livestock Marketing Specialist; FREE REGISTRATION at **go.osu.edu/2021beefschool**; Must Pre-Register online to receive Zoom webinar link - This program will take a look at the cattle markets and how management decisions influence marketing outcomes, including calf value in the marketplace. Contact information: Garth Ruff, ruff.72@osu.edu

February 24th, 2020, 6 PM: **Ohio Cattle Feeding Webinar**; Topics include livestock risk protection and livestock gross margin insurance and feedlot ventilation requirements; register at go.su.edu/2021beefschool

March 10th, 2020, 12 PM: **Introduction to Beef on Dairy Genetics Webinar** with Allen Gahler, OSU Extension, Sandusky County

OHIO WOODLAND STEWARDS

FRIDAY'S ESCAPE TO THE FOREST

Take a break to relax and revisit the woods with us...

Every Friday, we will post information on Ohio's woodlands, wildlife, invasive species, management recommendations, and more!

Visit <u>woodlandstewards.osu.edu/resources</u> to access videos, articles and apps.

November 13th 10am - 12pm Spotting the Spot - A National and State Update on the Spotted Lanternfly

November 20th 10am - 12pm Timber Rattlesnake Ecology & Conservation in Ohio



Friday Farm Coffee Breaks @ 10am 20 minute live webinars and recordings posted to jefferson.osu.edu

January 22: CAFO Requirements
February 26: Farm Wildlife Management
March 26: Water Quality Testing
April 23: Ag Law Update

Questions? Contact Erika Lyon at lyon.194@osu.edu or 740-461-6136

OSU SOUTH CENTERS YOUTUBE CHANNEL

Check out the many videos and playlists available at

youtube.com/user/southcenters

SPECIALTY CROP CORNER

SOUTH CENTERS CHAT WITH TOM WORLEY

TREE TALK

New! TREE ID CLIPS

FORAGE FOCUS WITH CHRISTINE GELLEY



MARKETING MATTERS

HIKING & HEALTH





Eastern Ohio Grazing Council

ONLINE

Check out the EOGC's YouTube channel for video presentations and virtual pasture walks. Topics already available include Grazing for the Summer Slump, Trampled Forage, August Pasture Walk and more.

go.osu.edu/eogcvideos

Subscribe to the YouTube channel and follow EOGC on Facebook at www.facebook.com/ EasternOhioGrazingCouncil

Stay tuned for future events!



Jefferson & Harrison

MASTER GARDENER

VOLUNTEERS

Training scheduled for Summer 2021

The Ohio State University Extension offices in Jefferson and Harrison Counties will be accepting new applications for the Master Gardener Volunteer training program for residents of both counties. Master Gardener Volunteers in Ohio contributed over 180,000 hours of service each year and offer assistance with home horticultural questions, pest identification, school programs, demonstrations, research, and continuing education programs.

Training sessions will begin in the summer of 2021.

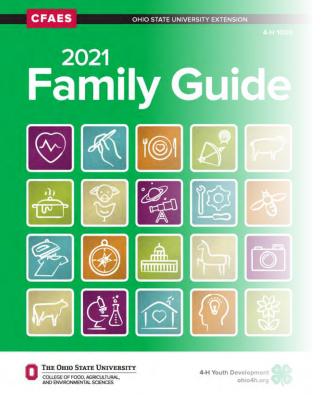
Participants interested in receiving the intensive training will learn about basic botany, plant physiology, soils, entomology, plant pathology, plant diagnostics, integrated pest management, pesticide use and safety, lawn care, home vegetable and fruit production, backyard wildlife management and much more! Working with county Ohio State Extension personnel, Master Gardener Volunteers provide educational services to their communities. If you are a garden enthusiast, this is a great opportunity to share your gardening know-how and skills with others in your community.

To find out more about this program, contact Erika Lyon at 740-461-6136 or email lyon.194@osu.edu. Look for more information on schedule, costs and registration in the January 2021 newsletter.









4-H Family Guide Available Online, By Mail

Attention Jefferson County Advisors... Every 4-H home in Jefferson County enrolled/re-enrolled by Jan. 1 will receive the 2021 Family Guide mailed to their address on file! The Ohio 4-H office is mailing the publication in a care package to each family, including stickers, beginning in January!

This is the place to connect to the entire collection of Ohio 4-H project books for the year. Each project book contains information and activities for members to explore as an organized group project or at home under the guidance of a parent or interested adult. When choosing a project, consider interests, background, what is necessary to start the project, and the resources available to help complete it.

Watch for more information on how to enroll using the new online platform being implemented for 2021!

OSU HAS UPDATED THE WAY IT IS DISTRIBUTING BOOKS FOR 2021. YOU CAN....

1. PLACE A TRADITIONAL ORDER AND PICK ORDER UP AT OUR OFFICE!

2. VISIT OHIO4H.ORG/BOOKSRESOURCES TO:

Avoid ordering entirely with one of our Perfect Stay-at-Home

Projects. Select from a dozen popular titles that can be viewed and downloaded for free. This year, a selection of 4-H Cloverbud activities is available too.

Order directly from <u>extensionpubs.osu.edu</u>. Ohio residents receive free shipping on orders of \$20 or more with coupon FREE2021. Books cost slightly more this way, but orders can be shipped directly to any Ohio address. There is no restriction on the number of times a coupon can be used. *Please review your order carefully. Extension Publishing is not able to accept returns.* See our printable <u>Ordering Is Easy</u> instructions.

- Don't forget! Members can create their own self-determined projects with the *My Own Stay-at-Home Project* idea starter.

Pumpkin Decorating Contest Winners Announced

Jefferson County 4-H held its first pumpkin carving competition last week. Members from many clubs ages 5-16 participated in the event. Winners spanned many categories from scariest to most original for more than 30 entries. All participants received recognition for their work. Here are the results, and some photos of many of the winners:

Beginner

No Carving

Painted Scariest: 1st Autumn Grafton Painted Cutest: 1st Leila Sudvary

Funniest: 1st Danica Scott Crayon Melts: 1st Ava Aftanas

Decorated Cuties: 1st JP Wilson 2nd Ava Aftanas

Decorated Holiday: 1st Emily Thompson Decorated Scariest: 1st McKenna Halicky

Carved

Freehand Scariest: 1st Joseph Hepburn 2nd Bryden Kittle 3rd Aubrey Hepburn 4th Ava Aftanas Freehand Funniest: 1st Chasity Stewart Freehand Most Original: 1st Brody Zeroski

Stenciled

Scariest: 1st Conner Best Most Original: 1st Ava Aftanas

Intermediate

Carved

Cutest: 1st Kaylee Spencer

Scariest: 1st Jasmine Stewart 2nd Pressley

Snodgrass

Most Original: 1st Madison Zeroski 2nd Aubrey

Duggan

Stenciled

Cutest: 1st Jasmine Stewart

<u>Senior</u>

Carved

1st Corissa Griffith



Cloverbud

Participation Ribbons
Davin Nelson
Dominic Stewart
Harper Bray
Ryiot Bennet
Scarlette Schaal
Trenton Stewart

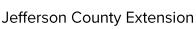














Congratulations To Our 2020 Most Stellar 4-H Representatives And Partners

Congratulations to these amazing 4-H representatives for their hard work this year!

- Christian Hoffman MO4-H'er Jr. -Liberty Gals and Guys
- Emma Morrison MO4-H'er Sr. Friends & Neighbors
- Lindsey Zifzal 2020 News Reporter Of The Year - Friends & Neighbors
- Consumers National Bank Friend of 4-H Award
- Carl Glenn Heart Award for all he does to help with 4-H camp and the horse program.
- Kelly Valuska Health Award for being the ultimate camp/fairgrounds nurse many years running.
- Not pictured: Matt Randolph Hands
 Award for being a huge help to Jr. Fair with
 everything from operating shows to
 organizing ribbons! Matt is currently visiting
 family out of state, while interviewing for
 several job positions.
- Jefferson County Fairboard -Head Award of the Head, Heart, Hands, Health award series for its foresight in coordinating a Junior Fair despite the COVID regulations! Thank you all for being an amazing example of perseverance during a very different 4-H year!
- Not pictured: Congratulations to Reece Fomenko for being recognized during the state's "Ohio Celebration Of Youth" on Nov. 6! Thank you Reece and family for being valued members of our organization! Watch the entire celebration here: https://youtu.be/LIs8oBbHDQk















4-H Committee Election Results

Congratulations to our newly elected/re-elected 4-H Committee members:

North - Jamie Wiley, Debbie Grimes

South - Clint Finney, Kelly Valuska, Cindy Stingle

At Large - Erin Ogden

Thank you to all the advisors who returned their absentee ballots.



Annual Volunteer Training To Take A New Look

As you are all aware, Ohio State University 4-H Volunteers have an outstanding reputation for their commitment to the development of our youth. In order to maintain this outstanding reputation, the expectations for Ohio 4-H Volunteers beginning in 2022 shall be they continue enhancing their skills to ensure all 4-H participants have a positive and educational experience by annually attending additional youth development training opportunities.

In line with the VRKC identified by the National 4-H Council, the Design Team has identified 6 core competencies; two of which must be covered each year. The topics underneath each corresponding competency may be taught at the discretion of the 4-H Professional. The Volunteerism Design Team will identify the two competencies to be covered on an annual basis.

This requirement will be piloted in 2021, and the expectation of implementation will be in 2022.

On an annual basis beginning in 2022, to remain active and in good standing for the upcoming 4-H year, all current Ohio 4-H Volunteers:

- Must participate in trainings covering at least <u>one</u> topic from each of the <u>two</u> identified volunteer competencies.
- Each of these topics must be a minimum 30 minutes for a total of no less than an hour, with the best practice being a total of 2 hours.
- These trainings are required in addition to the Ohio State University Extension Recognizing & Reporting Child Abuse (Policy 1.50) training.



Vickie Whinnery has received your cards and says thank you for your kindness!

Subcommittee Update

Subcommittee meetings will be held via Zoom until COVID numbers decrease in Jefferson County and a place to meet can be secured. Please email allison.325@osu.edu to be sent a link to participate.

The next meeting will be Wednesday, Nov. 18.

(Tuesday is a scheduling conflict)

6 p.m. – Still project/small animal

7 p.m. – Horse

8 p.m. - Livestock

Current Regulations Regarding 4-H Meetings

For the most recent information, please visit ohio4h.org/families/stay-connected

Effective September 1:

- Hosting virtual meetings and events is preferred
- If activities are critical/essential and are inperson, they must be education-focused.
- Groups cannot be larger than 50 people, including adults, youth, presenters, etc.
 - This directive is dependent on local health department guidelines.
 - The group size may need to be reduced to 10 (or another amount) based on the directives of your local health department.
- Face masks are required.
 - This includes inside AND outside at all times.
 - Program participants and parent/guardians ages five and older must wear a mask.
 - The exception is shooting sports where safety is a concern when on the line. Refer to the full guidance document online for additional shooting sports guidance (link below).
 - Medical conditions or disability exceptions are also permitted.
- Potlucks and buffets are not permitted.
- Any time your county is designated a Level 4 Public Health Emergency (color coded purple by the Ohio Department of Health) all in person 4-H club meetings and events must be held virtually or postponed until the designation changes to Level 3 or below. Ohio's Public Health Advisory system updates are at

coronavirus.ohio.gov/portal/gov/covid-19/publichealth-advisory-system

4-H Camp Piedmont 2021

If you are planning 2021 vacations, keep in mind our normal 4-H camp dates would, in theory, be the third week of June. The dates each year are determined by a committee. Jefferson County is part of the committee, but those dates are not set in stone until the committee finalizes the schedule. So plan accordingly and hope for the best!

20

NOV2020



SUN	MON	TUE	WED	THU	FRI	SAT
01	02	03	04	05	06	07
Start a graffinde journal. Each sley write down comething you are translut for.	With a thank, you note to your 4-11 advisor.	Think of someone you are grateful to know. Tell them,	Complete one random act of kindness today.	Send a limit to someone who makes you smile and tell them why.	Handwrite a letter and mail it to a friend.	Create a piece of art that shows what you are thentiful for
08	09	10	11	12	13	14
Spend time with someone you care about.	Complement at least 5 other people today.	Think of someone you are proud of Tall thans	Thank a veteron for their service. Veteron's Day	Volunteer to do an urginment test., Our taking out the partiage or daing the dahes.	White a thank you note to a special teacher.	Bake a treat for your neighbors.
15	16	17	18	19	20	21
Gather 10 items from your closet to donate.	Miske a social reads post highlighting a penson you stre gradeful for.	Write a thenk you note to a ceach or mentor.	Color a picture and give it to a friend.	Do a family member's chares for them today.	Set time aside to play a game with your family.	Stern a photo of namething you are greated for ar- social media.
22	23	24	25	26	27	28
Think of a creative way to Pay it Forward today.	Leave a note of ancouragement for a friend.	Call a relative you haven't spoken to recently.	No complaining day! Each time you want to complian, any consetting you no grateful for instant.	Spend time with family and friends. Thankagiving	Give a small gift to someone for no reason at all.	Write a letter or note to your parents or grandparents.
29	30					
Donate one conved food him for such day you forget to write in your grattlude journal	Read over your grafflude journal and spend time reflecting on the chattenge.					

4-H wants you to take our 2020 Gratitude Challengel 2020 has not been an easy year, but we still have plenty of reasons to give thanks. Print this calendar and complete each daily task to help show gratitude to your Club, Community, Country, and World.

Use #4HGrowsHere, #Grateful4Her, and #4HGratitudeChallenge to spread an attitude a gratitude to all of your social media friends and followers.





LESLIE'S CLOVERBUD CORNER



Hello Cloverbuds,

I am giving you a few things you can work on in November and December. Have mom, dad, grandma anyone who can help.

- 1. Color the Grinch and mail back if possible I would love to hang it in my office.
- 2. Complete the Grinch and Santa's on his Way word-finds. Take a photo and send to me in an email.
- 3. Let us cook a family snack with adult supervision: Grilled Pizza Rollups. If you do not like pepperoni or mozzarella, change it up. Maybe turkey and swiss, or ham and cheddar.
- 4. Let us not forget about birds. Here is a craft to get them feed. Enjoy.

Sound like a lot, but these next two months you may have more free time. Get what you can done, and you can always carry over into January.

Holiday Recipe:

Grilled Pizza Roll-Ups

Ingredients

4 slices of sandwich bread 4 mozzarella cheese sticks or ½ cup shredded mozzarella cheese 12 slices pepperoni (optional) 1 tablespoon unsalted butter ½ cup marinara sauce, warmed

Recipe by Catherine McCord, Food Network

If you are a Cloverbud Advisor, please email Leslie (aftanas.2@osu.edu) so you can be added to the Cloverbud list to receive additional activities.

Directions

- 1. Cut the crusts off the bread. Using a rolling pin, roll out the pieces of bread until flat.
- 2. Place a cheese stick or 2 tablespoons of cheese on the edge of the bread closest to you. Place 3 slices of pepperoni, if using, on the bread above the cheese. Tightly roll up the bread, pressing the seam end to adhere.
- 3. Melt the butter in a sauté pan over medium heat. Cook the roll-ups seam-side down until golden, 1 to 2 minutes. Flip and cook until golden all over, 1 to 2 more minutes.
- 4. Cut each roll-up into pieces and serve with the sauce for dipping.

Food for the Birds - Bird Wreath

You will need:

³/₄ cup flour ● ½ cup warm water ● 3 tblsp light corn syrup ● 1 package of unflavored gelatin ● 4 cup quality bird seed

- 1. Mix gelatin in warm water until it dissolves. Be sure that it is lump free.
- 2. Whisk in corn syrup and flour until a paste-like mixture forms.
- 3. Mix bird seed with paste.
- a. If creating a wreath, press $\frac{1}{2}$ of mixture in a greased bundt pan or a mold. Press firmly. Add a loop of twine with a piece extending from the mold for hanging. Add rest of mixture and press firmly.
- b. If creating ornaments, grease a muffin tin or other mold. Firmly press seeds into wells, then take a pencil or a dowel rod to poke holes through the top of the mixture.
- 4. Place molds in a warm, dry place for 6-8 hours to harden. The mix will begin to whiten as it dries.
- 5. Carefully remove mix from mold and flip upside-down on a flat surface to allow the underside to dry. Wait another 6-8 hours until completely dry. Note: Wreaths that are not fully cured will mold quickly.
- 6. Use biodegradeable string or twine to decorate and hang outside.

Tips: Don't place wreath outside when temperatures are above 50 degrees F. Don't place wreath out in rain. Instead of making a paste, use only bird seed, water, and gelatin. The mix will be crumbly and will take a little longer to dry. Pour excess gelatin into molds.

From the Maryland Dept. of Natural Resources HabiChat Newsletter



Color in The Grinch!

ARTIST'S NAME:

Christmas Word-Find: Santa's List

SWCASDSPWE PSNHS ILOHARRANW TLOWY RRLNREEANE Q L R S O E S ICLMTYE Т OENEBYSOTM AB HVK ECT N D PNBHPOV KNORLXMPAGOOM ADJDEGUAZ S NILHX REDNOSE Y C F 0 0 FNR VLZEU S Т NUTSI EDNIE RUJSCZD REHSADLHKOINOTO Ε YTRATAIL Ι I D ROVASFRSXRFXLLP MTUTDBCOPHUTPBH Find the following:
ANTLERS
BLITZEN
CANDY CANE
CHESTNUTS
CHRISTMAS
COAL
COMET
CUPID
DANCER
DANCER
DASHER
DONNER
HOOVES
JINGLE BELLS
LIST

NORTHPOLE

PRANCER

PRESENTS RED NOSE

REDSUIT

REINDEER ROOF RUDOLPH SANTA SLEIGH BELLS SNOW TOYS



The Grinch Word-Find

ZVCIBWPAEHE GZIHRYKYKB $\mathsf{C} \mathsf{N}$ Ι RGΙL J 7 J H D R Ε IUAYF EYI Е 0 S Z Т $D \times U$ Τ Ε 0 D MP W A RR M M H Y AΝ L E U Ι AZLW BAFV Z RΕ Ε M U В G R P 0 F VIH C H TZ D K J NPHL0 G OCWPSEHVFWUSZ

Ohio State University Extension Jefferson County greatly appreciates the support of the Jefferson County Commissioners: Dr. Thomas Graham, Dave Maple, Jr., and Thomas Gentile.

Ohio State University Extension embraces human diversity and is committed to ensuring that all research and related educational programs are available to clientele on a nondiscriminatory basis without regard to age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, sexual orientation, or veteran status. This statement is in accordance with United States Civil Rights Laws and the USDA.

