



OHIO STATE UNIVERSITY EXTENSION

ANR EXTENSION CONNECTION

Agriculture & Natural Resource news and events for Jefferson County

Ready, Set, Plant!

May—June | 2019

The sun is out, and for many of us, the planting season is underway! As a general reminder, Extension will provide site visits free of charge to help with questions regarding planting, diagnostics, farm management, soil testing, and much, much more! Call and schedule an appointment today!

Speaking of the planting season, it's important to keep track of the year's growing degree days (GDD). GDD is a measurement of the growth and development of plants and insects based on the amount of time the temperature is above a minimum threshold value that is dependent on the species. There is some math involved, but the Ohio State Phenology Calendar can do the math for you—the only numbers you need is the zip code in which you are planting in. Visit oardc.ohio-state.edu/gdd/default.asp for the calendar.

We had a great spring season for programs. Thanks to all who participated in the "Cultivating Shiitakes" class in March—we had a full class with a lot of enthusiasm for mushrooms! 2019 was also a big year for Beef Quality Assurance (BQA) and the Farmers' Winter Breakfast Series. Over 50 producers as of April 1st have become BQA certified at one of the in-person county trainings, and more trainings are planned for this summer. We also had ~50 landowners who learned about land values, royalty checks, distressed watersheds, and landowner liability issues this year during the Farmers' Winter Breakfast Series. Stay tuned for more exciting events!

Have a happy May Day!

Erika Lyon
Extension Educator, Agriculture & Natural Resources
Ohio State University Extension

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LEARN MORE ABOUT ASH HAZARDS

By Amy Stone, OSU Extension Lucas County

Last month, Joe Boggs authored a BYGL Alert entitled, *Ash Breakage: the Hazard Continues* (March 19, 2019). To follow-up with this topic, we wanted to alert you to a webinar from EAB University called *Dead Ash Dangers and Considerations for Risk and Removal* and *Emerald Ash Borer: Perspective from a Recently Infested State*.

All EABU webinars are free, and all webinars are recorded and posted online after the session. Check out the list of previously recorded sessions on the regionally EAB website at: <http://www.emeraldashborer.info/>

While EAB is what some called old news in Ohio, there are folks who want to stay updated on its progress. The EAB invasion has advanced across the Northeast over the

last decade, with the first detections occurring in western New York in 2009 and the most recent detections in Maine in 2018. Presently, infestation across the region may be characterized as mix of generally infested areas, newly infested locations, and expanding satellite infestations, with many areas yet to be invaded. The spatial and temporal dynamics of the EAB invasion along the leading edge from New York to Maine will be discussed, including a review of selected management activities, updates on recent changes, and future direction of management and regulatory work in light of reduced funding and potential federal deregulation.

Stay updated on EAB and other invasive species through EABU!

More Information
Emerald Ash Borer University
emeraldashborer.info/eabu.php

Regional Emerald Ash Borer Website
emeraldashborer.info

PAINTED HICKORY BORERS FLARE-UP FROM FIREWOOD

By Joe Boggs, OSU Extension Hamilton County

I received an e-mail message over the weekend from a homeowner asking what kind of large beetles could be emerging from firewood stored in an unheated garage. I replied there were two possible candidates: painted hickory borers (*Megacyllene caryae*) and banded ash borers (*Neocyttus caprea*). In response, the homeowner sent some very clear pictures yesterday: they were painted hickory borers.

Although both borers are "longhorned beetles" (family Cerambycidae); so named because of unusually long antennae, only the painted hickory borers sport long antennae. Banded ash borers have relatively short antennae for a longhorned beetle.

Neither of these native beetles presents a risk to wood furniture, flooring, paneling, or other processed wood in homes, or wood used in home construction. They are just nuisance pests if they find their way into homes. However, their sudden appearance can be a surprise and cause concern; particularly inside log homes.

Painted hickory borers will only infest dead trees that died within one year or raw wood (e.g. firewood) that has been cut for less than one year. They target a wide range of hardwoods including their namesake host as well as ash, black locust, hackberry, honeylocust, oak, Osage orange, walnut, butternut, and occasionally maple.

Banded ash borers will only infest trees that are dying or recently dead and they have a much narrower host range. The borer will infest ash, as their common name implies, as well as hickory, elm, and occasionally white oak. Their narrow host range coupled with a strong dependency on ash could present a challenge for this borer

given the loss of ash to emerald ash borer (*Agilus planipennis*).

Both beetles are considered forest products pests because they may infest fresh-cut logs used for lumber or firewood. However, they also play an important role in forest ecosystems. Both serve in the "clean-up crew" by starting the biodegradation process to convert large wood fibers into smaller organic particles that ultimately support soil microorganisms important to soil health.

On a final note, this is also the time of year when we get incorrect reports that locust borers (*M. robiniae*) are emerging from firewood in and around homes. This is another longhorned beetle that is closely related to the painted hickory borer and both beetles share similar markings. It is common for homeowners who are relying on online identification resources to make an incorrect ID. However, painted hickory borers emerge in the spring and locust borers emerge in late summer to early fall at about the same time common goldenrod (*Solidago canadensis*) is in full bloom. In fact, locust borer adults are most easily spotted on goldenrod partaking of the pollen and nectar.



Joe Boggs, OSU Extension©

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CONSIDERATIONS IF STARTING OVER WITH A NEW SEEDING

By Victor Shelton, Natural Resources Conservation Service State Agronomist / Grazing Specialist



March 20th was officially the first day of spring this year. If you look at growing degree days (GDD) for the last month around the state, we have had about thirty percent less than the average. We've talked about GDD's before. Growing Degree Days are calculated by taking the average between the daily maximum temperature and daily minimum temperature and subtracting the base comparable temperature for each day. Days are then added together to compare periods. It is probably the most common way of assessing where we are in plant growth compared to other years, since weather is different from year to year.

Growing degree days provides a "heat" value for each day. The values added together can provide an estimate of the amount of growth plants have achieved. Some people use GDD's to predict when plants will reach a certain growth stage. The developmental stage of most organisms has its own total heat requirement. I like to compare different years. Even though last spring was really wet to begin with, we had enough GGD's to boost early growth and to make this year look a bit puny so far. We are somewhat behind, but I expect it to catch up soon.

Fields that have had a lot of damage this winter from pugging may be damaged so badly they will not recover or be very productive. Even if not totally destroyed, they may have enough damage and open bare soil that weeds may be a major problem. Severely damaged fields, ones that have more than thirty percent bare soil showing, might indicate a good opportunity to totally start over with improved forages. But, evaluate them thoroughly, they might not be as damaged as they appear and fertilize if needed.

If starting over with new improved forages, you need to completely terminate all existing forage, especially if it has any anti-quality factors such as ergovaline in old Kentucky 31 tall fescue. Time helps, along with some good herbicides. Interseeding grasses into established grass stands just doesn't work well. Established grasses will almost always out-compete seedling grasses. Seed, labor and time is too valuable to not succeed. First, the year prior to conversion, graze, clip or mow the field to prevent it from going to seed. This really helps to greatly reduce the KY31 seed bank.

A spray-smother-spray method works very well. Graze the spring growth, then spray the stand with a non-selective herbicide, wait a week or two to let that forage die back and start to decay and then drill in a summer annual forage, such as sorghum-sudangrass, sudan grass, a millet, or a mix. This summer forage can later be grazed or, depending on what was planted, cut for hay.

In August, spray the field a second time to make sure that there are no remaining perennial species and to kill any remaining summer annuals. When conditions are good, no-till drill the new improved species into the field. New fields will need adequate time to grow before being grazed. Ideally, if planted in the fall, grazing should be restricted until the next fall. Since you are investing a lot of money to get a new stand of forages, you will want to protect that investment, so you will want them to last. Most would not think about it, but even KY31 tall fescue takes time to fully establish as a solid stand, so have patience with your newly seeded stands.

For technical assistance in choosing forages, seed varieties, rates for reseeding pastures, seeding methods, and fertility contact your local soil and water conservation district or extension office. For assistance in herbicide recommendations,

consult your local extension office.

I was recently at a good workshop on Novel tall fescues. In the late 90's, the University of Georgia and Ag-Research in New Zealand isolated naturally occurring endophytes that produced alkaloids associated with good persistence, vigor and drought tolerance, but did not produce toxic ergot alkaloids associated with poor animal performance. The first MaxQ tall fescue releases were Jesup and GA 5. There are several available today. These endophyte-friendly tall fescues provide increased average daily gains, good yields and even persistence as good or better than even KY31. This is a huge improvement over low endophyte varieties that were not very persistent and were sometimes eventually taken back over by old KY31.

If you are having issues with endophyte-infected tall fescue then switching may be worth the effort and expense. Symptoms for grazing animals include heat stress, rough summer coats, narrowing of blood vessels that can cause loss of hooves, tails, and ears, reduced intake and gain, low birth weights and poor reproduction rates. Research shows that switching from endophyte-infected fescue to Novel or other forages can potentially double the rate of gain on cattle.

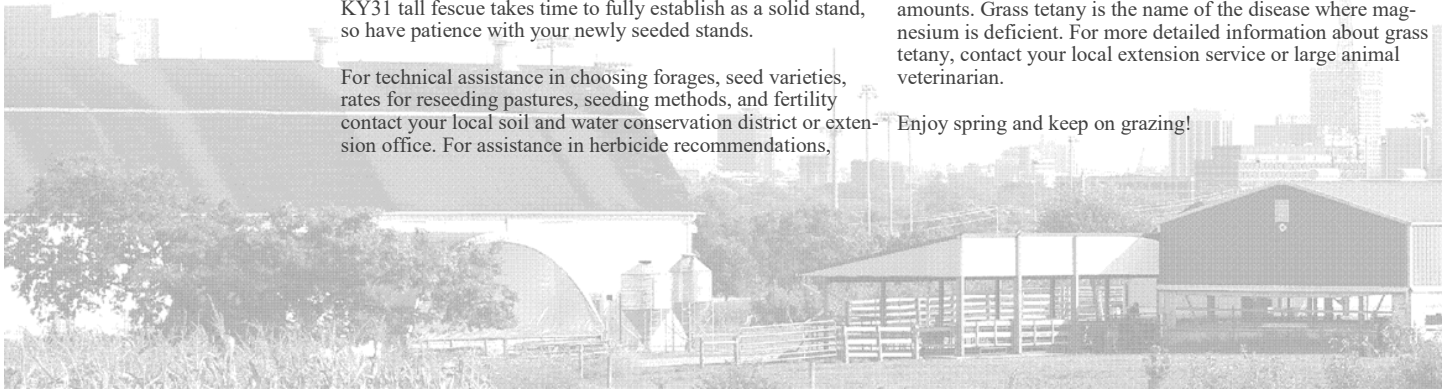
I really don't know what some of the hills located in the fescue "belt" would look like today if they hadn't been seeded to tall fescue back in the 40's. It certainly has prevented a lot of soil erosion, but thank goodness there are better alternatives today that also protect soil while providing good, nutritious forage.

It would be impractical to replace many fields of KY31 tall fescue at one time. Many producers are already stocked higher than they should and taking very many acres out of production for even one season is very hard to do. It is best and most practical to just try and convert a field or two at a time. As fields are added, concentrate first on using those, once established, for 30 days prior to breeding for improved pregnancy rates on cows. As more fields are added, start utilizing them for growing animals, improved gains, and improved milk production of lactating cows.

It's not always possible or practical to eliminate all the KY31 tall fescue on your land. If not, dilution is a fair to good defense, especially with red clover. High-density, short-duration grazing systems with sufficient rest periods help to promote diversity in monocultures of tall fescue. Limit the use of nitrogen fertilizers that will actually increase the ergovaline toxin in tall fescue and reduce clover at the same time. Nitrogen will boost grass yields, but it also feeds the toxic fungus. Avoid grazing close to the ground or the seed heads of KY31 tall fescue where the toxin generally concentrates.

I'll end this issue with a thought on magnesium. With temperatures fluctuating right now and new grass being utilized by livestock, it is easy to be short on magnesium when the animals consume lots of new "washy" green grass. It is a good idea to move to a high magnesium type mineral supplement (usually 10-20% instead of 1 or 2%) and continue with it until you are past the early flush of new forage. The issue with insufficient magnesium is more of a problem where nitrogen and/or potassium have been applied recently, or in excessive amounts. Grass tetany is the name of the disease where magnesium is deficient. For more detailed information about grass tetany, contact your local extension service or large animal veterinarian.

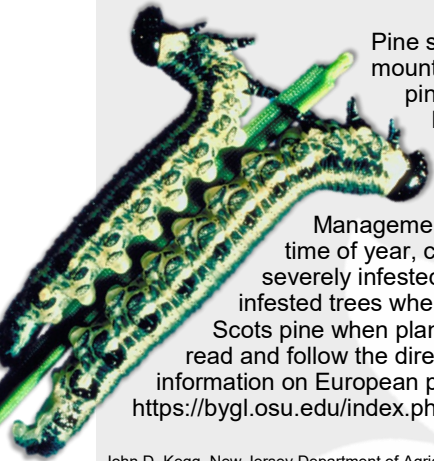
Enjoy spring and keep on grazing!



PINE PROBLEMS? NOW'S THE TIME TO CHECK FOR PINE SAWFLIES

By Erika Lyon, OSU Extension Jefferson & Harrison Counties

Earlier in April, we reached growing degree day (GDD) #144, which meant it was time for those pesky European pine sawflies to hatch from their eggs. Brought into North America in 1925, their range has since grown immensely—you will find European pine sawflies from Ontario, Canada, down to Missouri and from the east coast all the way west to Iowa. The larvae, which look more like caterpillars than anything else, have a grayish green coloration with two adjacent greenish stripes on either side of the body—this coloration allows them to blend in with their surroundings. They can reach up to about an inch in length, and mature larvae have a shiny black capsule on the head. These little guys can cause significant aesthetic damage in pines found in nurseries, backyards, and Christmas tree plantations by feeding on last season's needles. This can lead to a "poodle"-like appearance on some of the branches.



Pine species that are the primary hosts for these sawflies include mugo pine, Scots pine, red pine, and table mountain pine, but you may also see damage to eastern white pine, Austrian pine, ponderosa pine, shortleaf pine, and pitch pine. The appearance of dry, straw-like needles is caused by young larval feeding. Older larvae will eat entire needles. Pines will typically survive an infestation, but growth might become stunted if repeated defoliation occurs. Larvae don't feed on new candle growth since there is only one generation in a season, and sawflies reach maturity before new growth even occurs.

Management starts with scouting for eggs. This should be done sometime between fall and early spring. At this time of year, check for tufts of straw-like, spindly needles that are the result of feeding by the younger larvae. Prune severely infested branches if this does not affect the general shape and appearance of the tree, and remove heavily infested trees when possible to prevent other trees in the area becoming infested as well. Choose resistant cultivars of Scots pine when planting new trees. Insecticides that target the larval stage should be applied early to mid-May—always read and follow the directions given on the label. But one of the best ways to effectively remove larvae is to squish 'em. More information on European pine sawflies can be found at <https://ento.psu.edu/extension/factsheets/european-pine-sawfly> or <https://bygl.osu.edu/index.php/node/277>.

John D. Kegg, New Jersey Department of Agriculture, Bugwood.org

MONEY DOES GROW ON TREES: DEVELOPMENT OF THE OHIO PAWPAW INDUSTRY

By Brad Bergefurd, OSU Horticulture Specialist, and Matt Davies, Assistant Professor, OSU

If you're lucky, valuable fruit in high demand could be growing on a tree on your property. Per acre, a pawpaw orchard has the potential to produce an annual gross income of \$50,000, including \$15,000 per acre for fresh fruit, \$30,000 per acre for frozen pulp, and \$5,000 an acre for seed and scion wood.

Members of the Lewis and Clark expedition ate pawpaws for pleasure, and, for a period in Missouri in 1806, subsistence. Our early American ancestors enjoyed pawpaws for centuries, spreading them as far west as Kansas. In 1541, the expedition of conquistador Hernando de Soto recorded Native Americans growing and eating pawpaws in the Mississippi Valley. Even though they had to clear pawpaw trees to create farmable land, white settlers savored pawpaw fruit—often the only fresh fruit available nearby.

Pawpaw trees, the largest edible fruit trees native to North America, grow from the Great Lakes down to portions of the Florida Panhandle with Mid-Atlantic and Midwestern states making up the predominant growing region. Pawpaw trees produce greenish-blackish fruit, usually three to six inches long. The flesh is pale to bright yellow and contains a network of glossy, dark brown seeds. A pawpaw's flavor is sunny, electric, and downright tropical: a burst of mango-banana-citrus that is incongruous with its temperate, deciduous forest origins. They also have a subtle

kick of a yeasty, floral aftertaste somewhat like unfiltered wheat beer.

Want to try some pawpaw fruit? Ask around at your local farmers market, where pawpaw fruit may show up from August or early October. They are not cheap, but you can have fresh pawpaw fruit shipped to you in season, and frozen pawpaw pulp year round. The specialty foods company Earthy Delights says that requests for pawpaws have gone up every year since National Public Radio (npr.org/sections/thesalt/2011/09/29/140894570/the-pawpaw-foraging-for-americas-forgotten-fruit) first aired a story about them in 2011. You can also go directly to the source and contact other regional growers and gatherers, who may be selling both frozen pulp and mixed fruit.

Can't find fresh pawpaw fruit? Drink beer! Pawpaw-flavored craft beer is popular among Ohio craft beer enthusiasts and is perhaps one of the most accessible ways pawpaws have been brought to the people. Breweries such as Weasel Boy Brewing in Zanesville, Sixth Sense Brewing in Jackson, and Jackie O's Brewery in Athens are just a few Ohio craft breweries using pawpaw in specialty craft brews. Pawpaw research orchards were planted in both Columbus and Piketon Campuses in 2018. Interested in growing Pawpaw? To acquire unbiased, research-based information to help grow the Ohio Pawpaw industry, over two acres of research orchards and native woodland research trials have been established on the Columbus and Piketon campuses of OSU. Pawpaw information from this and past years trials and from the Ohio Pawpaw Growers Association can be found on the projects web site at southcenters.osu.edu/horticulture/fruits/

pawpaws, the OPGMA website (ogma.org/), or to receive information on upcoming pawpaw trainings and field days, subscribe to the email list at go.osu.edu/horticulturelistserv or contact Brad Bergefurd at Bergefurd.1@osu.edu.

Due to the pawpaw's enticing taste and untold culinary possibilities, it is in high demand by brewers, consumers, chefs, bakers, ice cream manufacturers, and fresh fruit purveyors throughout Ohio. Pawpaw production has been researched on a small-scale at the OSU South Centers in Piketon since the 90's with small acreage observation and demonstration trials. In 2018, Marketing and Orchard Resource Efficiency (MORE) Ohio Pawpaw, a new statewide, grant-funded project spearheaded by Principal Investigators Brad Bergefurd, a horticulture specialist with OSU Extension and Dr. Matt Davies, an assistant professor in CFAES, were awarded funding for this research and education project thanks to a USDA and Ohio Department of Agriculture Specialty Crop Block Grant.



Rebekah D. Wallace, University of Georgia, Bugwood.org

BEEF QUALITY ASSURANCE TRAINING & CERTIFICATION

With consumers concerned for animal welfare and sustainable production, Beef Quality Assurance (BQA) is now required by food giants like Tyson Foods, who work with 25% of the US beef market share, and Wendy's, currently the 2nd largest fast food hamburger chain in the US beginning in 2019 to meet public demand.

ONLINE CERTIFICATION: visit www.bqa.org to get BQA certified online. Online training consists of series of lessons and quizzes to become certified. Training will take ~2 hours.

LOCAL CERTIFICATION OPPORTUNITY: Join OSU Extension at the Jefferson County JVS on Wednesday, May 1st, 2019 from 7pm-8:30pm for in-person BQA training. Another BQA training will be held June 27th in Cadiz.

**WEDNESDAY,
MAY 1st, 7-8:30 P.M.**

**Location: Jefferson County JVS,
1509 County Highway 22 A,
Bloomington, OH**

**THURSDAY,
JUNE 27th, 6-7:30 P.M.**

**Location:
Puskarich Public Library, 200 E.
Market St, Cadiz, OH**



**For more information
and to RSVP contact
Carroll SWCD at
330-627-9852**

GRAZING MEETINGS & PASTURE WALKS

Visit carrollswcd.org/eastern-ohio-grazing-council to view flyers and information for upcoming pasture walks

SAVE THE DATE 2019 Pasture Walks:

April 25th—Carroll County
May 23rd—Harrison County

June 27th—Carroll County
July 25th—Columbiana County
August 22th—Tuscarawas County

September 26th—Jefferson County
October 24th—Stark County



*Are you interested in
obtaining a pesticide
license or fertilizer
certification?*

Next Pesticide & Fertilizer Exam

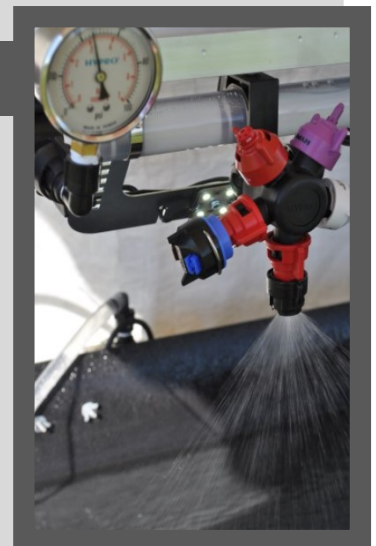
**Tuesday
June 18th, 2019
9 A.M.—1 P.M.**

**Bantam Ridge School,
587 Bantam Ridge Road (Extension
Meeting Room),
Wintersville, OH 43953**

New applicators will need to complete an application, pay a \$30 license fee, and register with the Ohio Department of Agriculture at go.osu.edu/pesticideexam.

Study materials may be purchased at your local OSU Extension office or found online at pested.osu.edu. Contact the Jefferson County Extension office with questions.

This testing session includes exams for both private and commercial applicators. A private applicator applies restricted-use pesticides on his/her own land, or rented land, and produces an agricultural commodity. A commercial applicator applies pesticides for hire, on publicly accessible sites such as golf courses, apartment complexes, restaurants, schools, or while working for a government agency. Recertification will need to be completed once every 3 years.



2019 Neighborhood Gardens Schedule

Dates	Topics
Session #5: May 6th	Crop Selection & Maximizing Production
Session #6: June 10th	Integrated Pest Management Techniques for Urban Gardens
Session #7: July 8th	Container Gardens
Session #8: August 12th	Native & Invasive Plants in Urban Gardens
Session #9: September 9th	Companion Plantings & Season Extension Techniques
Session #10: October 14th	Hydroponics & Aquaponics

Classes run every 2nd Monday of the month at 7pm January to October. The first 5 sessions will be held at Jefferson County JVS, 1509 County Highway 22A in Bloomingdale. Session #6 on June 10th will be at the Bantam Ridge School in Wintersville, and sessions #7 and #8 (July 8th and August 12th) will be held at the Schiappa Branch Library in Steubenville. Cost for each session is \$5/person, and pre-registration is required. Call the Jefferson County Extension office at 740-264-2212 or send an email to lyon.194@osu.edu to register for each session. Topics of sessions are subject to change.



Conservation in Your Backyard Workshops

Conservation in Your Backyard (formerly Backyard Food Production) monthly workshops continue! Join us for sessions covering a range of topics, including honey production, gardening, and much more! These workshops are free to attend, but contact the Harrison SWCD at 740-942-8837 so we know how many to expect.



<p>TUESDAY MAY 7th, 2019 6 p.m.—8 p.m. 38600 Lees Run Rd, Cadiz</p>	<p>May Topics Homesteading hosted by Bill & Rose Bush</p>	<p>June Topics Honey Production Pollinators Hosted by Thistle Glen</p>	<p>TUESDAY JUNE 4th, 2019 6 p.m.—8 p.m. 81101 Kanoski Rd, Cadiz</p>
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***Master Gardener Volunteers at the
Farmers Gateway Market!***

The Farmers' Gateway Market will be open for business in June at Eastern Gateway Community College in Steubenville, which means that you can look for the Master Gardener Volunteer booth to get your questions about backyard fruit, vegetable, and flower production answered. The farmers market begins Wednesday, June 5th, and the Jefferson & Harrison Master Gardeners will be there every other week starting June 12th.



Enjoy Local Foods!

***The Farmers Gateway Market will run from
June 5th—September 25th 4:30 PM—6:30 PM***

SAVE-THE-DATE



**Summer Song
Vineyard
Twilight Walk**

**TUESDAY
AUGUST 6th
4 PM—7 PM**

**LOCATION: 46375 Old
Hopedale Road, Cadiz**

Join Jeff Copeland, owner of Summer Song Vineyard, Dr. Maria Smith, OSU Viticulture Outreach Specialist, and members of the OSU enology team for a vineyard tour and discussion of grape site selection, disease management, growing recommendations, and the best grapes for wine. Cost of the event is \$10 per person and includes a light dinner. Pre-registration is required—register by July 30th by contacting OSU Extension, Jefferson County at 740-264-2212 or email lyon.194@osu.edu.

**CFAES****OHIO STATE UNIVERSITY EXTENSION**

Jefferson & Harrison MASTER GARDENER VOLUNTEERS

WEDNESDAYS & THURSDAYS • October 2nd – November 7th • 5:30PM-8:30PM

The Ohio State University Extension offices in Jefferson and Harrison Counties are currently 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 October and continue into November. 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.



Call 740-264-2212 or send an email to lyon.194@osu.edu for more information.

Cost of the program is \$100, part of which includes a Master Gardener Training Manual and a name badge.

Participants can choose to purchase supplemental reference books and materials for an additional \$125.

Deadline for registration is August 30th. Interviews will be held the first week of September.



jefferson.osu.edu
harrison.osu.edu

**THE OHIO STATE UNIVERSITY****COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES**

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu. For an accessible format of this publication, visit cfaes.osu.edu/accessibility.

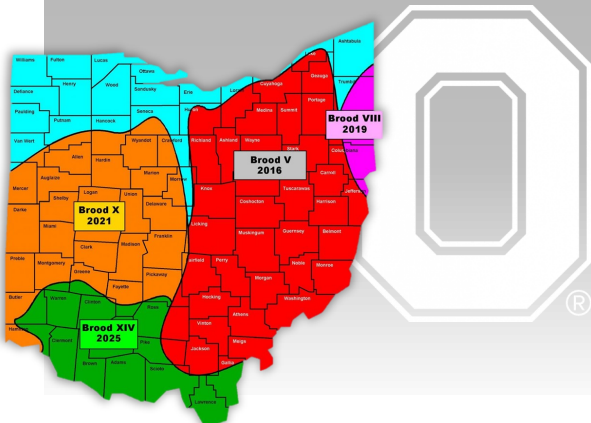
Brood VIII: Return of the Periodical Cicada



For those of you who thought you wouldn't see another periodical cicada for the next 15 years, you may be in for a surprise this summer. The brood VIII cicadas are scheduled to emerge this year, with a large number appearing in May and June. Jefferson County is on the far western edge of the known distribution for this brood, so we likely won't see the numbers that we had with brood V in 2016.

Periodical cicadas can cause damage to trees—adults will lay eggs in small twigs that can result in “flagging” or dead twigs in the canopy. While not typically serious in mature trees, young trees can die from cicada damage. Delay tree planting until adult cicadas die off or prevent egg-laying by covering susceptible trees and shrubs with nylon netting or cheesecloth when the first male songs are heard. Prune and destroy twigs with eggs. Use of pesticides is not recommended for periodical cicadas.

Not to be confused with periodical cicadas, the “Dog-Day” cicadas emerge every year in the summer months and are larger than the periodical cicadas. For more information on both types, visit ohioline.osu.edu/factsheet/ENT-58.



SEASON CALENDAR

MAY

- 5/1 Beef Quality Assurance @ Jefferson JVS, 7pm
- 5/6 Neighborhood Gardens @ Jefferson JVS, 7pm
- 5/7 Conservation in Your Backyard @ 38600 Lees Run Rd, Cadiz, 6pm
- 5/12 Happy Mothers Day!
- 5/23 Eastern Ohio Grazing Council Pasture Walk in Harrison County, 6pm
- 5/27 Memorial Day—Office Closed

JUNE

- 6/4 Conservation in Your Backyard @ 81101 Kanoski Rd, Cadiz, 6pm
- 6/10 Neighborhood Gardens @ Bantam Ridge School, 7pm
- 6/14-15 Ohio Beef Study Tour
- 6/16 Happy Fathers Day!
- 6/24-29 Harrison County Fair
- 6/27 Eastern Ohio Grazing Council Pasture Walk in Carroll County, 6pm
- 6/27 Beef Quality Assurance @ Puskarich Public Library, 6pm

JULY

- 7/4 Independence Day—Office Closed
- 7/8 Neighborhood Gardens @ Schiappa Branch Library, 7pm
- 7/24-8/4 Ohio State Fair
- 7/25 Eastern Ohio Grazing Council in Columbiana County, 6pm

EXTENSION'S MOST WANTED...

First Detector training in Ohio promotes awareness and detection of new or emerging plant pest threats to Ohio's rural and urban agricultural or natural systems. First Detectors are part of the National Plant Diagnostic Network (NPDN) and the Ohio Plant Diagnostic Network (OPDN).

First Detector training is available (free!) online, just check out the links below!

<http://firstdetector.org/index.jsp>

FD website sign-up:

1. Select the link above to go to the First Detector Training Website
 2. Create a new account with a username and password
- ⇒ If you are a Certified Crop Advisor (CCA) please enter your CCA Certification Number. The Online Modules included in the Crop Biosecurity Course are worth 1 continuing Education Credit each, for up to 6 credits, one per module.
- ⇒ Once you have the username and password you may log into the site and select "Our E-Learning Modules"
- ⇒ Successfully complete the six modules of the Crop Biosecurity Course; you will have completed the basic First Detector Training!
- ⇒ Download certificates for the modules you successfully complete.





HAVE A BURNING QUESTION?

There is a lot of information available online—how can you distinguish between the good and the not so good resources?

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How to Hire an Arborist

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An arborist, by definition, is an individual trained in the art and science of planting, caring for, and maintaining individual trees. Arborists are knowledgeable about the needs of trees and are trained and equipped to provide proper tree care. Hiring an arborist is a decision that should not be taken lightly. Proper tree care is an investment that can lead to substantial returns. Well-cared-for trees are attractive and can add considerable value to your property. Poorly maintained trees can be a significant liability. Pruning or removing trees, especially large trees, can be dangerous work. Tree work should be done only by those trained and equipped to work safely in trees (ISA, 2018).

Arborists provide services such as pruning, fertilizing, damage assessment, or other problem diagnosis. Full-service arborists are professionals who possess skills in planting, transplanting, pruning, fertilizing, disease and insect diagnosis, pest management, tree removal and stump grinding. Consulting arborists are experts who offer advice, but do not perform the actual services. They specialize in tree appraisals, diagnosing problems, and recommending treatments.



Arborists are trained in tree care such as proper pruning.

Tips for Selecting an Arborist

- Check online, searching under "arborist" or "tree service." Look for accreditation as an ISA certified arborist.
- Beware of door-knocking salespeople, who are especially common after storms and when invasive tree species enter the area. When these types of events happen, nonprofessionals see a chance to earn some quick money. Often these events create high risk situations for both workers and homeowners. Buildings and existing landscapes can be damaged if work is not done properly.
- Obtain several quotes before purchasing tree services. You may have to pay for the estimates, and it will take more time, but it will be worth the investment long term. Once you have had a positive experience with an arborist, working together in the future can develop a relationship beneficial for the long-term care of your trees.
- Never be rushed by bargains and don't always accept the low bid. You should examine the credentials and the written specifications of the firms that submitted bids and determine the best combination of price, work to be done, skill, and professionalism to protect your substantial investment.
- Never pay in advance.
- Check for necessary permits and licenses. Some governmental agencies require contractors to apply for permits and/or to apply for a license before they are able to work in the community. If a pesticide application is being made, the company is required to have a current pesticide applicator license through the Ohio Department of Agriculture.
- Companies should be bonded and insured. You

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