Hello Northeast Ohio Counties!

The 2018 Farm Bill has been passed by the House and the Senate, and is rumored to be signed into law by the President later this week. Look for information about the new farm bill from OSU in the coming days and in next weeks edition of this newsletter.

Also, it is important to mention that the Pymatuning Creek has been designated a wild and scenic river. It is the 15th scenic river in Ohio, Ashtabula’s 4th river (most in Ohio) and Trumbull’s 1st.

Finally, I have gotten reports that soybeans are still coming off with relatively low moisture. The rest of the week looks difficult to get into fields with temperatures in the upper 40’s.
Building a better weapon against harmful algal blooms

Source: Materials provided by Ohio State University. Original written by Misti Crane. Note: Content may be edited for style and length. https://www.sciencedaily.com/releases/2018/12/181217101801.htm

Predicting and pinpointing which farming practices are most likely to protect against environmental harm is a complex proposition, and researchers at The Ohio State University are working to fine-tune the tools that could help farmers and others prevent harmful algal blooms.

This week at the American Geophysical Union (AGU) fall meeting in Washington, D.C, a team of scientists from The Ohio State University shared early results from a trio of studies that aim to improve models designed to guide agricultural practices for reducing the risk of nitrogen and phosphorus farm runoff. Such runoff leads to the growth of toxic algae in waterways.

Basic models for predicting the consequences of various decisions, such as when to apply fertilizer, are available but they must be refined in order to ensure reliability and gain the trust of interested parties, including farmers and environmental protection organizations, said Jay Martin, a professor of ecological engineering at Ohio State.

Asmita Murumkar, a postdoctoral researcher at Ohio State, said her work is beginning to illuminate how the timing of fertilizer application intersects with heavy rains to contribute to nutrient runoff. She’s working with the Ohio Applicator Forecast, a tool that uses National Weather Service data to assign risk estimates to applying fertilizer at various times.

Murumkar is hopeful that her research will help quantify what impact the tool would have on the environment under different scenarios- say if a quarter of farmers in the Maumee River watershed used it, or half.

"We want to better understand how much phosphorus runoff it would reduce in the region," Martin said, adding that there’s plenty of evidence that individual farm practices impact runoff from those farms, but less evidence in terms of larger-scale estimates.

"We know from our previous work that fertilizer timing is important, but we want to be able to look across the whole Lake Erie Basin and know best-case and worst-case scenarios and this modeling will help address that," he said.

Margaret Kalcic, assistant professor in Ohio State’s Food, Agricultural and Biological Engineering Department, said farmers are encouraged to follow the "Four Rs" for right time, source, amount and place when applying fertilizer.

"But 'right' is not clearly defined, and our team is working to provide our partners in Ohio, including farmers, advocates and policymakers, with better answers," Kalcic said.
Added Martin, "There's more subtlety here than just watching the weather and the ground moisture and we're trying to determine the best solutions that support agricultural production and environmental protection."

Grey Evenson, a postdoctoral researcher at Ohio State, will present initial findings on his work to identify the best data to use in modeling, so that it offers a more accurate picture of what is happening in fields and adjacent waterways.

"We don't want to underestimate -- or overestimate -- the value of these best management practices. For instance, some practices may produce greater benefits than we give them credit for in the model -- such as improving soil health, which leads to better water retention," Evenson said.

Added Kalcic, "A lot of this work is about tuning existing models. By improving the quality of information we put into them we have greater confidence in the information that comes out of them." She said that there are many questions about the larger environmental impacts of practices such as no-till farming, which is generally thought of as environmentally friendly.

"We know that no-till is good for preventing soil erosion, but there are still uncertainties about its effects on water quality in the region," Kalcic said.

Graduate student Anna Apostel discussed a third project, in which she's manipulating various parameters in one model to try to determine how reliable -- or not -- the model is. The long-term goal is to move toward more-robust estimates of how practices contribute to water quality.

Martin said adjusting parameters so that magnitudes of processes better match reality and data from observations in the field is a critical part of improving model performance.

"We want to adjust our equations to better represent reality," Apostel said.

The overarching goal of all the work, the researchers said, is to have models that better align with what the researchers have observed in field experiments but that can look at the issues on a broad, regional level.

"We know that if you build a bad model it's not going to help anybody make any decisions," Kalcic said.

"We really want to build trust in truly useful models that will help policymakers, farmers and others. The worst thing would be that people trust models that are telling them the entirely wrong message," she said.

Northeast Ohio Agriculture

OHIO STATE UNIVERSITY EXTENSION
Ashtabula and Trumbull Counties

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Depreciation of Farm Assets under the 2017 Tax Law
by Chris Zoller, Extension Educator

The Tax Cuts and Jobs Act (TCJA) revised some differences between farm and non-farm assets and added other depreciation rules that will have a significant impact when calculating net farm income.

Revised Recovery Period for Farm Machinery & Equipment

Under the TCJA, new farm equipment and machinery placed in service after December 31, 2017, is classified as 5-year MACRS property. Previously, machinery and equipment was classified as 7-year MACRS property. These assets must be used in a farming business. Equipment used in contract harvesting of a crop by another tax payer is not included in the business of farming.

Used equipment is still classified as 7-year MACRS property. The Alternative Depreciation System (ADS) for all farm machinery and equipment, new and used, is 10 years. Grain bins and fences are still 7-year MACRS property with a 10-year ADS life.

Farm Equipment Purchase Example:

Bill Brown purchased a new combine on September 28, 2017. In May 2018, he purchased a new tractor and used tillage tool. In August 2018, Bill constructed a new fence and in September he constructed a new grain bin. These assets are MACRS recovery classes:

- New combine (2017) 7-year
- New tractor (2018) 5-year
- Used tillage tool 7-year
- Fence (2018) 7-year
- Grain bin (2018) 7-year

New Rules for Depreciation Methods

Assets placed in service after December 31, 2017, have depreciation rates increased to 200% Declining Balance (DB) for those farm assets in the 3, 5, 7, and 10-year MACRS recovery classes. Assets in the 15 and 20-year MACRS recovery classes are still limited to a maximum
of 150% DB. Residential rental property and nonresidential real property continue to be limited to Straight Line (SL) depreciation.

Farm Equipment Depreciation Example:

Bill Brown paid $430,000 in 2017 for the new combine. He elected out of bonus depreciation and did not elect any Section 179 expense deduction. The half-year convention applies. Bill depreciates the combine over a 7-year MACRS recovery class using the 150% DB method. His depreciation is:

$$[(\frac{430,000}{7}) \times 0.5 \times 150\%] = 46,071$$

What is the difference if Bill waited until 2018 to make the combine purchase?

$$[(\frac{430,000}{5}) \times 200\%] = 86,000$$

$86,000 – $46,071 = $39,929 more than if purchased in 2017

Excess Depreciation

The increase in the rate of depreciation, combined with the shorter MACRS recovery class for new farm equipment and machinery, may generate more depreciation than needed. Taxpayers may choose to use the Straight Line (SL) method of depreciation and may also elect to use the 150% method. Both elections are made on a class-by-class basis each year. To further reduce the amount of depreciation, you may elect to use the ADS, which calculates depreciation using the SL method and lengthens the recovery period.

Resources:

**Farm Bankruptcies Are Stabilizing**

Sources: Robert Dinterman and Ani L. Katchova, Farm Income Enhancement Program, Department of Agricultural, Environmental and Development Economics- The Ohio State University

Chapter 12 bankruptcy filings have been fairly stable over the past few quarters and have stabilized to around the same levels as when chapter 12 became a permanent fixture of the bankruptcy code in 2005. The US experienced elevated levels of chapter 12 filings towards the end of 2009 through mid-2012, but aside from the second quarter of 2017 there has not been a
quarter with more than 150 chapter 12 bankruptcies filed and that is a good sign for the agricultural sector. In general, the second quarter, which consists of the period between April 1st and June 30th, is the quarter that typically has the highest number of bankruptcies in a year.

While nationally there has been a stabilization of farm bankruptcies, there is still substantial regional variation in farm bankruptcies and some areas are doing better than others across the US. For instance, Wisconsin led the nation in farm bankruptcies over the past year with 47 chapter 12 cases filed between October of 2017 and September of 2018. This has been a recent trend for Wisconsin as they had 41 filed the 12 month period before October 2017 and 36 the 12-month period before that. While Wisconsin has had an upward trend, they have not seen the largest increase in bankruptcies year-over-year as Nebraska, New York, and Minnesota have seen larger gains in the number of farm bankruptcies filed since October 1st of 2017.

Central Ohio Precision Ag Symposium
By: John Barker, Extension Educator, Knox County
Source: https://u.osu.edu/ohioagmanager/

The Central Ohio Precision Ag Symposium will be held on Wednesday, January 16, 2019 at All Occasions Catering 6986 Waldo-Delaware Rd., Waldo Ohio from 9 a.m. to 4 p.m. This year’s program will feature the most current technologies available in precision agriculture. These topics will be shared by some of the leading university and industry Precision Ag experts.

This year’s program opens with a discussion regarding where we are in Precision Ag today – “The Adoption of Precision Ag Technologies” – Jack Zemlicka, Ag Division Content Director Lessiter Media and ends with a look into the crystal ball – “The Future of Precision Ag” – Dr. Scott Shearer, The Ohio State University.

Data management is a “hot” topic in today precision agriculture. Dr. John Fulton will share his insights on “Data Considerations in Today’s Crop Production”. You will learn about data security and who can/has access to your data at afternoon breakout sessions from Climate-Fieldview, Agleader–Agfinity, and My JohnDeere. Learn about the value of your data and opportunities for selling your data at one of the Farm Mobile breakout sessions.

Artificial intelligence is changing our industry. Tim Norris will discuss “AI” and share insights from Knox County’s first autonomous tractor. “AI” will be part of several other afternoon breakout sessions as well. New datum changes are scheduled for 2022. Jeff Jalbrzikowski will explain how this change could potentially affect our current maps and GPS positioning files.

“To be the premier source of research-based information in the age of digital agriculture” is the vision of the Ohio State Digital Ag Program. Dr. Elizabeth Hawkins will discuss the nearly 100
OSU on-farm research trials conducted throughout Ohio in 2018. Everyone in attendance will receive a copy of the 2018 eFields Report.

Afternoon breakout sessions will include manufacturing and technology updates including how to get the most from your in-cab displays from John Deere, Case IH AFS, Precision Planting, Capstan, AGCO, New Holland and Soil Max.

$50 registration fee includes a buffet lunch, breaks and a notebook containing all presentations. Seating is limited, registration deadline is December 28, 2018.

This symposium will provide up to 11.5 Continuing Education Credits (CEU’s) for Certified Crop Advisors (S&W – .5, I.P.M. – 5.5, C.M. – 5.5). This program is sponsored by The Ohio State University Extension, AgInfoTech, Advantage Ag & Equipment, Ag Leader, B&B Farm Service, Beck’s, Capstan, Centerra Co-op, Central Ohio Farmers Co-op, Channel, Clark Seeds, Climate Corp., Evolution Ag, Farm Credit Services, Farm Mobile, First Knox National Bank, JD Equipment, Ohio Ag Equipment, Precision Planting, Seed Consultants, Smart Ag and Soil-Max.


Farm Tax Issues- What Tax Reform Means for Farmers
By: David L. Marrison, Coshocton County Ag & NR Extension Educator- marrison.2@osu.edu
Source: https://u.osu.edu/ohioagmanager/

The goal of last year’s Tax Cuts and Jobs Act was to simplify taxes. While simplifications were made, I would argue that farm taxes have become more difficult. There have been major changes to equipment depreciation, like kind exchanges, and a brand new Qualified Business Income deduction.

I know many tax preparers are pulling their hair out trying to get a handle on all these changes. My advice to farmers is to make sure to communicate with your tax preparer before the end of the year to see how these changes may impact your 2018 taxes.

Today, I would like to provide a brief overview of the changes which farmers will want to have on their radar.

Depreciation- Tax reform made some significant changes to how farmers depreciate their farm business property. First, the depreciation recovery period for new farm equipment and machinery placed into service after December 31, 2017 has been shortened from seven to five years.
years. However, used farm equipment, grain bins, and fences will keep their current depreciation life of 7 years.

The method to calculate depreciation is also changing as any property used in a farming business and placed in service after Dec. 31, 2017, will now use the 200 percent declining balance method versus the 150-percent declining balance method. However, farmers can elect out of the use of the 200 percent method.

For farmers wishing to accelerate depreciation, Section 179 and Bonus Depreciation are still options which can be used. Bonus depreciation has been moved back up to 100% from 40% and the limits on Section 179 expensing has been increased to $1 million dollars for 2018. Using these accelerated depreciation methods can be tricky so make sure your tax accountant helps you determine if they should be used or not.

Like-Kind Exchanges—Another wrinkle which will impact farmers is the elimination of the Section 1031 like-kind exchange for personal property like farm equipment. It does still allow for a like-kind of exchange of real property such as land.

Previously the gains or losses realized on the trade-in of farm equipment was generally deferred. Bottom line is that the elimination of the like-kind exchange treatment for equipment means that farmers who trade in a piece of equipment will most likely now have a reportable tax event.

We would recommend that farmers consult with their tax professional before they buy equipment as it could have tax implications. Your tax accountant can help you analyze the purchase and may be able to offset the gain by using accelerated depreciation on the new piece of equipment. Definitely more paperwork.

Qualified Business Deduction—Farmers will also need to talk to their accountant about the new Section 199A Deduction or Qualified Business Income Deduction. This new deduction was added due to the reduction in taxes for C-Corporations. Previously C-Corporations could be taxed at a rate up to 35%. The tax reform legislation set a flat rate of 21% for all C-Corporations.

The reduced flat rate was only for C-Corporations so legislators had to account for other business entities like Sole-Proprietorships, Partnerships, S Corporations, and LLCs who could have still been subject to a maximum tax rate of 37%.

This led to the development of the Qualified Business Income (QBI) Deduction. This deduction allows for a deduction of up to 20% of qualified business income. There are a lot of moving parts and limitations to this deduction so again it is imperative to talk to your tax accountant.
This is an additional wrinkle for farmers who sell their milk or grain to cooperatives as it will trigger an additional calculation.

There is also a lot of discussion whether farm rental income qualifies for QBI which could impact landlords and their tax returns. All this is clear as mud to most tax preparers and we are waiting for guidance from the IRS. Bottom line is that farm taxes will be harder not easier to file.

Help—OSU Extension is helping farmers and tax preparers understand these new tax changes. Local Extension offices are hosting educational seminars and we will also be offering tax webinars for your convenience. We encourage you to check out the Ohio Ag Manager Website at http://ohioagmanager.osu.edu for updates on these events. In addition, our team will be writing more in-depth articles about each of these changes.

Upcoming OSU Extension Sponsored Tax Updates:

Farmer & Farmland Owner Income Tax Webinar
Monday, January 7, 2019
10:00 – 12:00 noon
$35 per person
Register at go.osu.edu/FarmerTaxWebinar
For more information contact Julie Strawser at 614-292-2433 or Strawser.35@osu.edu

Farm Tax Update:
Thursday, January 17, 2019 from 1:00 to 3:00 p.m.
Tuscarawas County Extension Office
Session is being held to help farmers understand the changes to farm taxes.
No registration fee.
Call 330-339-2337 for more information or to register
Garden Reflections by the Ashtabula County Master Gardeners
By: Ashtabula County Master Gardeners
The Ohio State University Extension
Master Gardener Column- June 2018

Keeping Amaryllis

Amaryllis (genus Hippeastrum) are popular holiday gifts. Available in a gorgeous array of reds, whites, pinks, purples and stripes, they provide weeks of exotic blooms when the outdoor garden is sleeping under a blanket of snow. Although they are not hardy in Ohio, these natives of Central and South America will live and bloom for several years with a little care.

Amaryllis are true bulbs. A true bulb is a compressed, underground stem. Bulbs are round to oval in shape, with a pointed top. When a bulb is cut in half vertically, its parts can be identified. The bottom or “basal plate” of the bulb cradles a tiny, modified “flower bud.” Surrounding the bud are white, fleshy “scales” that contain food for the plant. The basal plate anchors the scales together and contains cells that become “roots.”

Many true bulbs, including amaryllis, also have a “tunic,” a thin covering of papery skin that helps protect the bulb from drying out. Onions, tulips, narcissus and lilies are examples of true bulbs. If you’ve seen an onion that has sprouted in the pantry, you’ve seen a bulb in action.

In their native surroundings, amaryllis do not have a dormant period. Cultivated as a potted plant, dormancy is artificially induced each year to regulate the time of blooming.

When received as a packaged bulb, the amaryllis has already undergone its induced dormancy, so it’s ready to bloom a few weeks after being planted in the provided potting medium. The flowers appear on an erect, hollow, leafless stem called a scape. Depending on the species, each bulb will produce two or more large, eye-catching flowers that persist for several weeks.

When the blossoms have faded, cut off the flower stalks and continue to water and feed the plant. In May move the pot outside and set in a place where it will receive morning sun. The pot may be sunk up to the rim in the ground so it won’t dry out as quickly. Before frost, lift the plant and replace the potting soil.
Store the pot in a dark basement and don’t water it. After several weeks, when you see signs of new growth, cut off the spent foliage, move it to a bright windowsill and water it. In a few weeks you will be rewarded with another display of dazzling tropical blossoms. Keeping the amaryllis watered and in a room not overly warm will help prolong the life of the blooms.

Some amaryllis don’t know they are supposed to have potting soil and fertilizer. My neighbor’s amaryllis are simply planted directly in the flower bed in the spring and mostly ignored. In the fall, the bulbs are popped into long, narrow containers in ordinary garden soil and tucked into a dark shelf in the basement for several weeks. The containers are covered with plastic wrap to prevent excessive drying out. The spent foliage is trimmed off after it is completely dry and withered.

When the bulbs are showing new growth, the containers are placed in an east window and watered. Some of these amaryllis, eight and ten years old and still blooming, have produced “daughters” that now fill several long planters.

Enjoy your amaryllis, don’t be afraid of it. Its exotic presence may be awe inspiring, but with very little maintenance, you can enjoy this beauty for years to come!

Submitted by the Ashtabula County Master Gardeners, with special thanks to Tom Miller for sharing his amaryllis expertise

"WATERSHEDS IN DISTRESS" RULES DON’T CLEAR THE JCARR HURDLE

By: Peggy Kirk Hall, Tuesday, December 11th, 2018
Source: https://farmoffice.osu.edu/blog/tue-12112018-126pm/watersheds-distress-rules-don%E2%80%99t-clear-jcarr-hurdle

The legislative Joint Committee on Agency Rule Review (JCARR) has voted to send the "watersheds in distress" rule revisions back to the Ohio Department of Agriculture (ODA). JCARR reviews administrative rules to make sure they follow legal requirements, which we explained in a previous blog post. The "watersheds in distress" rules seek to address agricultural nutrient impacts on water quality, also explained in an earlier post. At its meeting yesterday, JCARR members voted 8 to 1 to recommend that ODA revise and refile the rules for consideration at JCARR’s next meeting on January 22, 2019.

The January 22 meeting date effectively removes Governor Kasich’s administration from the rules revision. Kasich issued an executive order last July directing his agencies to prepare the controversial rule package. But the incoming DeWine Administration will control the fate of the
rules since DeWine takes office on January 14, 2019. JCARR is apparently counting on the new administration to take a different approach on agricultural nutrient pollution reduction.

"There will be a new administration and we'll have maybe more productive talks," stated JCARR's chair, Sen. Joe Uecker (R-Loveland). "The DeWine Administration has demonstrated an interest on working with stakeholders on this issue."

The lack of stakeholder involvement was a common concern voiced by JCARR members, who stated that the rules had been rushed and did not involve all of the interested parties. Several committee members also suggested that the rules are inconsistent with legislative intent and will have a significant adverse impact on farmers. The Ohio Soybean Association, Ohio Corn & Wheat Growers Association, and Ohio Farm Bureau echoed those criticisms to JCARR members while several local residents, local groups and the Ohio Environmental Council testified that the rules would not sufficiently protect water quality.

If ODA fails to refile the rules proposal for the January meeting, JCARR will have 31 days to recommend that the Ohio General Assembly invalidate the rules. That action would allow each chamber five days to pass a resolution invalidating the rules; if the concurrent resolution does not pass within that time period, the rules would stand. Alternatively, ODA could remove the proposal from JCARR's agenda and refile revised rules at a later date, a likely course of action for the incoming DeWine administration.

**Southern Ohio Specialty Crop Conference**  
Source: [https://u.osu.edu/vegnetnews/2018/12/14/southern-ohio-specialty-crop-conference/](https://u.osu.edu/vegnetnews/2018/12/14/southern-ohio-specialty-crop-conference/)

Registration is now open for the 2019 Southern Ohio Specialty Crop Conference. It will be held on February 5, 2019 at the Oasis Conference Center in Loveland, Ohio. The deadline to register for this conference is February 1, 2019 at 12:00 Noon. No walk-ins are permitted. Registration is limited to 75 people, so register early to avoid being shut out.

This is the conference to attend for Southern Ohio specialty crop growers. Fifteen different class options on fruit and vegetable production are available at this conference. Your registration includes a continental breakfast and a buffet lunch. All attendees will receive a USB memory stick with copies of every available presentation to take home, so even if you don’t attend the session, you’ll still get the information. Private pesticide and fertilizer re-certification credits will be available for categories 3, 5, core and fertilizer. Don’t miss this opportunity to learn from industry experts and share information with other growers.

The Oasis Conference Center is conveniently located about 5 miles off of I-275 on the northeast corner of Cincinnati.
Digital agriculture, combining multiple data sources with advanced crop and environmental analyses to provide support for on-farm decision making, continues to change and advance our industry. Data and digital technologies can provide insights and opportunities to improve crop management by responding to each season’s unique conditions. Next month, The Ohio State University Extension and the Digital Ag team at OSU are hosting “Precision University: In-Season Decisions” to help you understand the opportunities and challenges of using data and tools to help make crop management decisions throughout the season.

The program will be held on January 9th at Beck’s Hybrid’s, 720 U.S. 40 in London, Ohio. University and industry experts will share information on the latest tools and technologies to help you make better decisions during the growing season. The event will also feature afternoon breakout sessions on using aerial imagery for decision making and the latest advancements in sprayer nozzle technology.

Presentations at Precision University begin at 8:30 a.m. with the program concluding at 3:30 p.m. The event will also feature vendors on site to share the tools and services they offer. CCA CEUs will be offered.

The cost to register for Precision University is $50 and includes the program, handouts, lunch and refreshments. For more information or to register, visit http://go.osu.edu/PrecisionU. The deadline to register is January 2.
Trumbull County Farmer Lunch Series

OSU Extension Trumbull County, Trumbull County Soil and Water Conservation District, and the NRCS have combined efforts to offer a farmer lunch seminar series that will cover a variety of topics relevant to NE Ohio. Each program will start with lunch at 11:30 A.M. sponsored by the Trumbull County Holstein Club followed by a 1-hour presentation. Cost for individual programs is $10/person. If you would like to register for all four programs, the cost is $35/person.

Tuesday, January 8, 2019 - Beef Quality Assurance
- Haley Shoemaker, OSU Extension Mahoning County
- The Ohio Beef Quality Assurance (BQA) program ensures that both beef and dairy cattle are raised in a manner that results in a wholesome beef product for our consumers. This program helps producers gain market access and keep their cattle desirable to the buyer in the stands.

*Wednesday, February 20, 2019 – NE Ohio Agronomy School in Bristolville, OH*

Tuesday, March 5, 2019 – Climate Impacts for Ohio Agriculture
- Aaron Wilson, OSU Byrd Polar and Climate Research Center
- Our changing climate has already influenced how Ohio farmers operate. Learn how predicted climate changes will continue to drive changes in Ohio agriculture. CCA credits available.

Tuesday, April 2, 2019 – Tillage Affects on Soil Health
- Steve Culman, Assistant Professor, State Specialist in Soil Fertility
- New tillage technologies are arriving each year, but are they hurting your soil health? Learn how tillage, and other practices can improve or hurt your soils health. CCA credits available.
Upcoming Events

Trumbull County Farmer Lunch
January 8, 2019 – Beef Quality Assurance
March 5, 2019 – Climate Impacts for Ohio Agriculture

April 4, 2019 – Tillage and Soil Health

Northeast Ohio Agronomy School
February 20, 2019 – Bristolville Community Center

Ashtabula County Dairy Banquet
March 26, 2019

Pesticide Applicator Training Dates
Trumbull County – January 16, 2019
Geauga County – February 1, 2019
Ashtabula County – February 28, 2019
Geauga County “Last Chance” – March 28, 2019

New Pesticide Applicator Training
Geauga County – February 12, 2019
Trumbull County – March 12, 2019

New Fertilizer Certification Training
Trumbull County – February 23, 2019 9A.M. to 12P.M

Central Ohio Precision Ag Symposium
January 16, 2019 - All Occasions Catering 6986 Waldo-Delaware Rd., Waldo Ohio 9 a.m. to 4 p.m
To register for the Trumbull Farmer Lunch program on January 8, 2019 please complete the form below and mail with payment to OSU Extension Trumbull County, 520 West Main St, Cortland, OH 44410. Please make checks out to OSU Extension. For questions or more information call 330-638-6783, or email beers.66@osu.edu.

The Ohio Beef Quality Assurance program ensures that both beef and dairy cattle are raised in a manner that results in a wholesome beef product for our consumers. In doing so, this program helps producers gain market access and keep their cattle desirable to the buyer in the stands. Many end users of beef are now requiring their meat to be BQA certified. This program will certify all participants. Cost for this training is $7/person with pre-registration or $10/person at the door. Catered hot lunch, handouts, and other materials are included in the cost. We would like to thank Bloomfield Livestock Auction for their sponsorship of this program. Pre-registration is requested by January 4, 2019 to ensure accurate count for lunch.

Trumbull County
Agriculture and Family Education Center
520 West Main Street
Cortland, OH 44410
trumbull.osu.edu
330-638-6783

To register for the Trumbull Farmer Lunch program on January 8, 2019 please complete the form below and mail with payment to OSU Extension Trumbull County, 520 West Main St, Cortland, OH 44410. Please make checks out to OSU Extension. For questions or more information call 330-638-6783, or email beers.66@osu.edu.

Name:________________________________________
Address:_____________________________________
City and State:___________________ Zip Code:___________________
Phone:____________________________ Email:_________________________
Number of Attendees:___________________ x $7 each = Total Enclosed ___________________
Private and Commercial Pesticide Applicator Licensing

Farmers and agricultural industry personnel can obtain either a “Private” or “Commercial” pesticide applicator license through the Ohio Department of Agriculture (ODA). OSU Extension helps in the licensing process by providing study material, practice exams, and local test preparation classes.

Private Pesticide Applicator’s Licenses are for farmers who apply restricted-use pesticides on his/her own land (or rented land) and produce an agricultural commodity. Each private applicator is required to take & pass the CORE test (general safety for the applicator and the environment) and any category(ies) that correspond to the crops he/she grows. There are 7 categories which certification can be received: Grain and Cereal Crops (category 1), Forage Crops and Livestock (category 2), Fruit and Vegetable Crops (category 3), Nursery and Forest Crops (category 4), Greenhouse Crops (category 5), Fumigation (category 6), and Specialty Uses (category 7). Complete details on the licensing process for private pesticide applicators and study materials can be found at:

http://pested.osu.edu/home/privateapplicator/licensing

Commercial Pesticide Applicator Licenses are for farmers or industry personnel who apply pesticides for a business or on land owned by someone else, and usually receive payment for their services. In agriculture this includes agricultural businesses who custom spray crops, as well as farmers who are hired to custom spray for fellow farmers. The commercial license area also includes applicators who work for a government or public agency such as a K-12 schools, colleges, universities, villages, townships, and park districts, in addition to applicators who apply to sites accessible to the public.

Each commercial applicator will need to take and pass the CORE test (general safety for the applicator and the environment) and the category(ies) that correspond to their commercial spray operation. These categories include: Aerial Pest Control (category 1), Agricultural Pest Control (category 2 with 6 sub-categories); Aquatic Pest Control (category 3 with 3 sub-categories), Forest Pest Control (category 4 with 2 sub-categories), Industrial Vegetation (category 5), Ornamental Plant & Shade Tree Pest Control (category 6 with 4 sub-categories), Vertebrate (category 7), Turf (category 8), Animal Pest Control (category 9), Domestic, Institutional, Structural & Health Related Pest Control (category 10 with 4 sub-categories), Livestock Predator Control (Category 11 for USDA employees only), and Wood Destroying Insect Diagnostic Inspection (category 12). Complete details on the commercial categories, licensing process, and their sub-categories can be found at: http://pested.osu.edu/commercialrecert

2019 Test Preparation Classes for Northeast Ohio

OSU Extension in Northeast Ohio will be providing two training sessions to help farmers prepare for the Ohio Department of Agriculture’s Private Pesticide Applicator’s Exam. Attendance at one of these classes is not required but is a great opportunity for applicators to learn what they will need to study for the test. This first class will be held on Tuesday, February 12, 2019 from 1:00 to 4:30 p.m. at the Geauga County Extension office. Call the Geauga County Extension office at 440-834-4656 to register. The second class will be held on Tuesday, March 12, 2019 from 1:00 to 4:30 p.m. at the Trumbull County Extension office. Call the Trumbull County Extension office at 330-638-6783 to register. The registration fee for each class is $35/person which includes CORE study materials.

See back page for Testing Sessions
2019 ODA Testing Sessions

Are you looking to take obtain your private or commercial pesticide license or wish to add an additional category to your existing license? The Ohio Department of Agriculture will be holding testing sessions during the winter/spring of 2019 in Northeast Ohio. These tests are administered by the Ohio Department of Agriculture and are held in northeast Ohio as a courtesy to producers. Pre-registration is required for each location and can be made by calling the ODA at 614-728-6987 or 1-800-282-1955 (press 3 then 1). For a full list of all locations and dates, visit: http://go.osu.edu/pestexam

### Astabula County
- **Location:** OSU Extension Office, 39 Wall Street, Jefferson, Ohio 44047
- **Date:** March 6, 2019
- **Time:** Testing Begins at 10:00 a.m.
- **Directions:** Call 440-576-9008

### Geauga County
- **Location:** Geauga County Extension Office, 14269 Claridon-Troy Road, Burton, Ohio 44021
- **Dates:** February 20, March 20, April 17, May 22, & June 19, 2019
- **Time:** Testing Begins at 10:00 a.m.
- **Directions:** Call 440-834-4656

### Lake County
- **Location:** Lake County Utilities Learning & Business Center, 1981 Blasé Nemeth Rd, Painesville Twp, Ohio 44077
- **Dates:** February 11 & April 8, 2019
- **Time:** Testing Begins at 9:00 a.m.
- **Directions:** Call 440-350-2582

### Mahoning County
- **Location:** Mahoning County Extension Office, 490 S. Broad Street, Canfield, Ohio 44406
- **Dates:** January 7, February 4, March 4, April 1, May 6, June 3, July 1, August 5, September 2, October 7, November 4, & December 2, 2019
- **Time:** Testing Begins at 12:00 p.m.
- **Directions:** Call 330-533-5538

### Portage County
- **Location:** Portage County Extension Office, 705 Oakwood Street, Ravenna, Ohio 44266
- **Dates:** January 17, March 21, May 16, July 18, September 19, & November 21, 2019
- **Time:** Testing Begins at 10:00 a.m.
- **Directions:** Call 330-296-6432

### Trumbull County
- **Location:** Trumbull County Extension Office, 520 West Main Street, Cortland, Ohio 44410
- **Dates:** January 22, February 13, March 13, April 10 & May 8, 2019
- **Time:** Testing Begins at 10:00 a.m.
- **Directions:** Call 330-638-6783
IN-SEASON DECISIONS

Experts will share info on the latest equipment and technologies to help you make better decisions during the growing season.

SPEAKERS

Dr. Ignacio Ciampitti, Kansas State University
Dr. Greg Kruger, University of Nebraska-Lincoln
Dr. Joe Luck, University of Nebraska-Lincoln
Dr. Anne Dorrance, The Ohio State University
Jim Degrand, The Ohio State University
Dr. Matt Darr, Iowa State University

SCOUTING Session: Andrew Bond, Encirca; Brian Sutton, Airscout; Jim Love, Beck’s Hybrids

EQUIPMENT & TECH Session: Michael Lairson, Raven Technology; Justin Moffit, John Deere; Tim Grigsby, Capstan Ag

January 9, 8:30-3:30
Location: Beck’s Hybrids

Registration Cost: $50
RSVP by January 2 at go.osu.edu/PrecisionU

Contact: Amanda Douridas
Douridas.9@osu.edu
937-484-1526

Thank You Sponsors

3 IPM, 0.5 CM and 1 PD CCA CEU Credits Available
2018 Post Fermentation
Wine Quality Control Workshop

Due to the success, interest and importance of the regional Post Fermentation Wine Quality Workshops, the OSU/OARDC Enology program will once again conduct the annual 2018 Post Fermentation Workshops for the Ohio commercial wine industry. This is considered by many attendees as one of the best and most applicable workshops of evaluating and enhancing individual commercial wine quality.

These workshops are typically focused on evaluating wines made from the current vintage (2018). However, it is also acceptable to evaluate other vintages that we plan to release in the near future for commercial acceptance and quality standards.

The Post Fermentation Workshops look to evaluate:

- Wines of good to excellent quality in sharing with the group
- Wines considered as being good in quality with beneficial discussion on ways of making them even better!
  - Accomplished through further fining or blending trials
- Wines which may exhibit possible off flavors, aromas or precipitates in our tanks
  - Learn how to recognize specific faults if present
  - Many faults can be remedied if detected early enough in the vinification process
  - People vary in their ability in detecting certain wine faults

The regional workshops continue to be done in a relaxed social format with winery personnel participating in an educational discussion of the wines being presented. Wines being submitted for possible flaws will be presented in a constructive format with possible remedies or treatments being suggested at this stage of vinification. One 750ml sample should suffice to share with the group in a regional setting. However, some groups have been large enough in past workshops that benefit from bringing two 750ml sample’s for sensory evaluation if feasible.

A brief harvest overview and updates will be provided by the OARDC enology and viticulture program for group discussion. Besides the educational benefits being provided at the workshops, they also provide the opportunity of cohesiveness within our wine industry. This holds especially true due to the Ohio wine industry growing significantly over the past decade. The workshops will also include a tour of the hosting winery which is likely to develop important questions and conversation. We make an effort in hosting these events at different wineries in showcasing the diversity we currently have in the state of Ohio.
Regional Settings:

1. Paper Moon Vineyards
2008 State Rd.
Vermillion, OH 44089
Phone: (440) 967 - 2500
Web site: http://papermoonvineyards.com/

2. Vinberige Winery
5400 St. Route 204
Glenford, OH 43739
Phone: (740)-670-3989
Web site: http: https://vinberigevineyards.com/

3. Valley Vineyards
2276 E. U.S. Routes 22 and 3
Morrow, OH 45152
Phone: (513) 899 - 2485
Web site: http: https://www.valleyvineyards.com/

4. Laurentia Vineyards & Winery
4599 South Madison Rd.
Madison, OH 44057
Phone: (440) 296 - 9175

Time:
1. Paper Moon Vineyards: Tuesday, December 11, 2018, 1:00 – 5:00 pm.
2. Vinberige Winery: Tuesday, December 18, 2018, 1:00 – 5:00 pm.
3. Valley Vineyards: Tuesday, January 8, 2019, 1:00 – 5:00 pm.
4. Laurentia Vineyards & Winery: Tuesday, January 22, 2019, 1:00 – 5:00 pm.

Cost: Free

Note:
- If you plan on attending one of the regional workshops or would like any additional information please contact Todd Steiner by phone at office: (330) 263-3881 cell: (330) 464-2239 or e-mail at steiner.4@osu.edu to enable us to get a better count for the hosting winery. Also, please indicate a contact e-mail and cell phone to touch base in case of inclement weather.

We encourage participation by bringing wine for sensory evaluation but ask that you limit your selection to several wines of most interest to you in sharing with the group for sensory evaluation and feedback.

Sincerely,

Todd Steiner
Todd Steiner, Enology Program Manager & Outreach Specialist
Questions For Speakers

Due to the complex and important topics to be discussed at the meetings, we are asking participants to pre-submit questions. There will be time for questions at the meetings, too. Pre-submitting questions will make sure that the speakers cover the information on the questions you have.

(Be specific and give details in your questions.)

1. ___________________________________________________________
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2. ___________________________________________________________
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3. ___________________________________________________________
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4. ___________________________________________________________
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You can submit more details or questions on separate paper if needed.

Meet the Speakers

Mr. Tom McCrumm, Tom and his wife Judy operate South Face Farm, a 2,000 tap operation in Ashfield MA, plus buying sap from another 3,000 taps. For 30 years, they served over 3,000 meals annually at their sugarhouse restaurant open 6 weekends during the maple season. They market their syrup locally and globally. Tom is also an avid collector of antique sap spouts and syrup tins.

Mr. Dan Milo, is a Food Safety Supervisor with the Ohio Department of Agriculture Division of Food Safety and a hobby maple producer in Northeast Ohio. Dan has been working for the benefit of Ohio maple producers at ODA for many years.

Mr. David Apsley, Dave is a Natural Resource Specialist for OSU Extension. He has more than 30 years of professional experience in forestry and natural resources education, management, and research.

Dr. Gary Graham, State Maple Syrup Specialist for Ohio State University Extension and County Educator in Agriculture and Natural Resources in Holmes County.

Ohio Maple Days is a statewide program sponsored by the Ohio Maple Program, Dr. Gary Graham and OSU Extension and Ohio Agricultural Research and Development Center.
To: All Interested Maple Producers & Enthusiasts

It’s time once again to make plans and you are cordially invited to participate in the Winter 2018 Ohio Maple Days Workshops in Morrow County January 18, or Holmes County January 19, or Geauga County January 20. As is our custom, essentially the same program will be offered at all three locations.

Pre-registration is required to ensure enough materials are made for the meetings

**Topics To Be Covered:**

**Food Safety Modernization Act (FSMA) and Ohio Department of Ag Updates:** The Food Safety Modernization Act contains a mandatory requirement for many food manufacturers, which includes maple syrup producers, to register their operation. There have been many changes in the past few years and there are even more changes to take place in the next year or two. Every maple producer, no matter operation size, needs to hear what is happening, as their future as maple producers depends on it.

**Maple Marketing is More Than Filling a Jug:** If you want to achieve the highest return for your maple syrup then just putting your syrup in a jug is not enough. Once the buyer has to market it by, making the connection from the syrup within the jug to you the producer. Building the story of how it’s made and who is making it are all critical for consumers to become invested in you and your products.

**Tubing Help for Any Size Operation:** Tubing has done more to revolutionize the maple industry and create growth more than any other piece of equipment. Tubing has made the collection process easier on the maple producer and on the sugahshur due to less time spent in the woods with heavy equipment. Tubing systems are easily adapted to any size maple operation. Looking back and forward to the newest technology, helpful hints will be presented to aid any size operation.

**Sugarbush/Woodland Management Tips that Pay:** Your woodlands are a valuable resource. Learn how a professional forester can develop a woodland management plan to increase the benefits that you receive from your woodland. This session will focus on using crown touching release and other crop tree management concepts to improve the health and productivity of your sugarbush.

**Maple Nuggets:** Every year there are lots of important happenings, things, and news to share with maple producers. These items will be addressed during this session as well as any questions submitted with the registration forms and not already answered by the speakers.

***To Help Us Prepare*** we are asking that you pre submit your questions/concerns/comments regarding any of the topics to be presented at the meetings [see back of the registration form]. The meeting forum will allow for questions from the floor. Pre-submitting questions will direct the program to emphasize what questions you, the producers, have. Handouts will be made available to participants at the meetings in regards to the topics being covered. Pre-registration is required to ensure we have enough materials and meals.

**Testing of Hydrometers:** Hydrometers are vital in every sugaring operation, so be sure they remain accurate. These papers can shift and readings will be off, of density and syrup could mold or ferment. If finished with too high of density, the syrup will crystallize. Bring your hydrometers with you to the meetings for testing; that way you know going into the 2018 season you will finishing your syrup at the proper density and proper color grade. Refractometers will also be tested, so bring them to the meeting.

Sincerely, Dr. Gary W. Graham, Ohio State University Extension Specialist, Natural Resources

Notice: After 11 years at the same price, the registration fee is being increased to cover the rising costs of food, rental space, and materials.

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**Registration Form**

Please return before January 12th

*Please checkmark the meeting attending*

- **Morrow County Meeting**
  Thursday, January 18, 2018 - 8:00 AM - 3:00 PM
  Lutheran Memorial Camp
  2790 State Route 61, Fulton, Ohio 43321

- **Wayne/Holmes County Meeting**
  Friday, January 19, 2018 - 8:00 AM - 3:00 PM
  Mennonite Christian Assembly Church
  10664 Fryburg Road, Fredericksburg Ohio 44627

- **Geauga County Meeting NEW LOCATION**
  Saturday, January 20, 2018 - 8:00 AM - 3:00 PM
  Huntsburg Community Center
  12396 Madison Road
  Middlefield, Ohio 44062

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**Details:**

- **8:00** Registration Table and Trade Show
- **8:30** Welcome, Introductions, OSU Extension & OMPA Reports
- **9:00** Food Safety Modernization Act (FSMA) and Ohio Department of Ag Updates
  - Mr. Dan Milo
- **10:00** Marketing is More Than Filling a Jug
  - Mr. Tom McCrumm
- **11:00** Sugarbush/Woodland Management—Tips that Pay
  - Mr. Dave Apsley
  & an ODNR Forester TBA
- **12:00** Lunch & Trade Show
- **1:00** Tubing for Any Size Operation
  - Mr. Tom McCrumm
- **2:00** Maple Nuggets—Ideas, Information, Questions & Questions for the Speakers
  - Dr. Gary Graham
- **3:00** Trade Show Closes

**Dates/Locations:**

- **Thursday, January 18** - Morrow County
  Lutheran Memorial Camp
  2790 State Route 61
  Fulton, Ohio 43321
- **Friday, January 19** - Wayne/Holmes County
  Mennonite Christian Assembly Church
  10664 Fryburg Road
  Fredericksburg, Ohio 44627
- **Saturday, January 20** - Geauga County
  NEW LOCATION
  Huntsburg Community Center
  12396 Madison Road
  Middlefield, Ohio 44062

Pre-registration is required

(please list all who are attending)

Name(s):
1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________

Address ___________________________ Zip _____________
City ___________________________ Telephone ___________________________

Number Attending: X $35 = $

Pay at the door fee $40

Please make checks payable to: OSU Extension

Registration Payment Deadline is January 12th

**Mail Registration To:** OSU Extension
75 East Clinton Street, Suite 109,
Millersburg, OH 44654

- NO REFUNDS AFTER JANUARY 12th

Contact: Ashley Gerber—330-674-3015
Private Pesticide Applicator Credits

Licensed Ohio pesticide applicators with a private license can obtain recertification credits during this conference. Every three years, applicators must obtain at least 3 hours of training with at least one hour of Core and at least 30 minutes of training for each additional category on their license. Licensed applicators can receive training throughout the three years of the cycle, as long as they meet the total training requirements before their license expires.

Bring your license to the conference. Ohio State University Extension will be set-up to check your recertification status and can let you know how much training you still need to recertify your pesticide applicator license.

For more information, contact

Ohio State University Extension
Warren County
320 E. Silver Street
Lebanon, OH 45036
Phone: 513-695-1311
Fax: 513-695-1111

e-mail: meyer.213@osu.edu
Visit us online at: http://warren.osu.edu

Registration includes a continental breakfast, buffet lunch and a USB memory stick containing all of the available handouts.

Registration Cost: $50
Registration deadline is February 1, 2019

New for 2019: Space limited to 75 registrants. Register early to avoid being shut out.

No walk-ins permitted. Sorry but no refunds will be given for this conference. If you are unable to attend after registering, we will mail your USB memory stick containing the handouts to you after the conference.

How to Register

Online (preferred method)
- Fast & easy.
- Pay with your credit card.
- Receive an emailed confirmation that you are registered for the conference.
- Go to the event website to access the online registration link.

By Mail
- Go to http://go.osu.edu/swohfvc
- Print off a registration form.
- Make your check payable to OSU Extension.
- Mail your registration form and check to:

Ohio State University Extension
Warren County
320 E. Silver Street
Lebanon, OH 45036

No confirmation will be sent to you, if you register by mail. Contact the Warren County Extension office if you have questions about your registration.
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00 a.m.</td>
<td>Check-in, coffee and continental breakfast</td>
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<tr>
<td>8:45 a.m.</td>
<td>Opening Remarks</td>
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<tr>
<td>Session #1</td>
<td>9:00 a.m. to 10:00 a.m.</td>
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<tr>
<td>Session #2</td>
<td>10:15 a.m. to 11:15 a.m.</td>
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<tr>
<td>Session #3</td>
<td>11:30 a.m. to 12:30 p.m.</td>
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<td>12:30 p.m.</td>
<td>Buffett Lunch</td>
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<td>Session #4</td>
<td>1:30 p.m. to 2:30 p.m.</td>
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<tr>
<td>Session #5</td>
<td>2:45 p.m. to 3:45 p.m.</td>
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</tbody>
</table>

### Session #1 A
- **Foliar or Soil Fertilizers for Specialty Crops: Which is Best?**
  - Brad Bergefurd
  - Ohio State University Extension
  - Recertification Credit - Fertilizer

### Session #1 B
- **Managing Spotted Wing Drosophila with Emphasis on Exclusion Netting**
  - Jim Jasinski
  - Ohio State University Extension

### Session #1 C
- **How Healthy Are Your Farm’s Finances?**
  - Greg Meyer
  - Ohio State University Extension

### Session #2 A
- **Pumpkin Production Systems with Emphasis on Using Cover Crops**
  - Jim Jasinski
  - Ohio State University Extension

### Session #2 B
- **Emerging Orchard Pest Problems and Their Management**
  - Dr. Celeste Welty
  - The Ohio State University
  - Recertification Credit - Category 3

### Session #2 C
- **Avoiding Mistakes on Small Acreage Spray Applications**
  - Greg Meyer
  - Ohio State University Extension
  - Recertification Credit - Core

### Session #3 A
- **Management of the Mildews & Bacterial Diseases in Cucurbit Crops**
  - Dr. Sally Miller
  - The Ohio State University
  - Recertification Credit - Category 3

### Session #3 B
- **Apple Fruit Rot Diseases**
  - Dr. Melanie Ivey
  - The Ohio State University
  - Recertification Credit - Category 3

### Session #3 C
- **Keys to Manage Insecticide Rotations and Integrated Pest Management on High Tunnels**
  - Dr. Luis Canas
  - The Ohio State University
  - Recertification Credit – Category 5

### Session #4 A
- **Tomato and Pepper Disease Management**
  - Dr. Sally Miller
  - The Ohio State University
  - Recertification Credit - Category 3

### Session #4 B
- **Commercial Pawpaw Production in Ohio: Can It Be Profitable?**
  - Brad Bergefurd
  - Ohio State University Extension

### Session #4 C
- **Biological Control to Manage Insects in High Tunnels: How to Develop a Program That Fits Your Needs**
  - Dr. Luis Canas
  - The Ohio State University
  - Recertification Credit – Category 5

### Session #5 A
- **Managing Corn Earworm and Other Worms in Sweet Corn**
  - Dr. Celeste Welty
  - The Ohio State University
  - Recertification Credit - Category 3

### Session #5 B
- **Managing Soil-borne Strawberry Diseases in Annual Production Systems**
  - Dr. Melanie Ivey
  - The Ohio State University
  - Recertification Credit - Category 3

### Session #5 C
- **Optimizing Pollination While Still Protecting Your Pollinators in Specialty Crop Production**
  - Amanda Bennett
  - Ohio State University Extension
  - Recertification Credit - Core