

ANNUAL



EXTENSION CONNECTION

March-April 2017

Agriculture & Natural Resource news and events for Jefferson County

DID THE GROUNDHOG LOSE ITS MIND THIS YEAR?

Six more weeks of winter felt more like six more weeks of spring. March 20 marks the official start of the spring equinox, but many of you will likely be out and enjoying the warm weather well before then.

So what does an early spring mean for Jefferson County? For beekeepers, warm temperatures may mean more hive activity earlier in the year. There are pros and cons to this heightened activity. More bathroom breaks may make your bees happy, but if a major frost event occurs while bees are out and about, a colony may have difficulty locating food.

Also, be on the lookout for new pest species. While insect and plant pests are often most commonly reported, it is the microorganisms that pose the biggest threat—more fungi and fungal-like organisms that cause disease make up much of pests migrating north. If you suspect you may have an emergent pest problem, contact our office for an identification. Reporting and finding out an organism is not a species of concern is preferable over not reporting a problem and having it spread.

We have many events coming up this spring! If you are new to farming, we have several conferences that may be of interest. Also, look for some upcoming programs put on by our Master Gardeners, including a Seed Giveaway!

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

Tree Swallow
(*Tachycineta bicolor*)



THIS ISSUE

- Greetings
- Soybean pesticide information
- What is limiting soybean yield?
- Bee resources and labels
- Small Farm Conference
- Women in Agriculture Conference
- Livestock and water-environment interactions
- Avian influenza and biosecurity
- Artificial Insemination School
- Warm winters & insect survival
- Growing Degree Days
- Master Gardener Seed Giveaway
- Morels
- Spring calendar
- Extension's Most Wanted
- Photography tips
- Events

Get to Know Your Local Farmers' Markets

- Back in full swing beginning in June -

Farmers' Gateway Market at Eastern Gateway
Community College
Downtown Steubenville Farmers' Market

Look for the OSU Jefferson/Harrison Master Gardener Volunteers at the Farmers' Gateway Market

XTEND SOYBEAN/DICAMBA INFORMATION

By Dr. Mark Loux, OSU Dept. of Horticulture & Crop Science

The latest blog post on the OSU weed management website, u.osu.edu/osuweeds, has information on XtendiMax and Engenia. This includes primary labels and soybean supplemental labels for both products, along with an ODA fact sheet summarizing key aspects and differences between the labels. We have also posted an OSU PowerPoint that summarizes some of the key stewardship information from labels. BASF and Monsanto have started to provide approved tank-mix components on their websites - www.xtendimaxapplicationrequirements.com and www.engeniatankmix.com. Reminder that anything that will be mixed with Engenia or XtendiMax – herbicides, adjuvants, etc. – must be listed on these websites prior to use. The same goes for nozzles, and approvals for these are starting to appear on the websites as well.

WHAT'S LIMITING SOYBEAN YIELD IN OHIO?

By Dr. Laura Lindsey, Assistant Professor, OSU Dept. of Horticulture & Crop Science

2013, 2014, and 2015, with funding from Ohio Soybean Council and help from county extension educators, we measured soybean yield limiting factors on 199 farms across the state. Data collected included management practices (i.e., crop rotation, variety, row width, etc), soil fertility status, soybean cyst nematode (SCN) egg counts, and soybean yield. These were the top yield-reducers in our research:

- 1.) Planting Date: On average, soybean fields planted before May 16 were associated with yields 4 bu/acre greater compared to fields planted on or after May 16. The greatest benefit of planting during the first half of May is early canopy closure which increases light interception, improves weed control by shading out weeds, and helps retain soil moisture. However, make sure soil temperature is at least 50°F at planting. Planting before field conditions are adequate comes with the risk of damping-off, bean leaf beetle, and late spring freeze damage.
- 2.) Soil fertility: A grain yield reduction of 7 bu/acre was associated with soil phosphorus levels less than the state established critical level while a grain yield reduction of 4 bu/acre was associated with potassium levels less than the state established critical level. However, there was no yield benefit to having soil phosphorus and potassium levels above the state established critical levels (i.e., If you're field is not below the soil phosphorus and potassium critical level, you're very unlikely to see a yield increase with additional fertilizer applications.)
- 3.) Soybean cyst nematode: Fields with over 200 eggs/100 cc of soil were associated with yields that were 6 bu/acre lower compared to fields with less than 200 eggs/100 cc soil. With as few as 1,600 eggs/100 cc soil, yield losses of 25% have been reported in Ohio. In our research, 80% of the fields sampled had detectable levels of soybean cyst nematode. Furthermore, many of the participants were unaware of any soybean cyst nematode problems in their field. (Often times, soybean cyst nematode infection causes no visible above-ground symptoms.) If you've never tested your fields for soybean cyst nematode, we suggest doing so.

There are many other factors that can influence soybean yield, so our soybean yield limitation research is on-going with funding from the North Central Soybean Research Program. If you are interested in participating, see our online survey tool at: <https://www.surveymonkey.com/r/ohiosoybean>.



RECENT LAW CHANGES AND RESOURCES FOR BEEKEEPERS & PESTICIDE APPLICATORS

This year brings several changes for beekeepers. The Veterinary Feed Directive (VFD) requires beekeepers to locate a veterinarian who is willing and able to visit apiaries and diagnose brood diseases to prescribe antibiotics (visit go.osu.edu/BpVX to review the VFD Fact Sheet). The OSU Bee Lab is compiling a contact list of veterinarians (practicing in Ohio) who are also beekeepers and may be willing to form client/patient relationships with beekeepers. These veterinarians will be able to assist with pest diagnostics and management. Veterinarians can join our contact list here: go.osu.edu/beevets.

Pesticide applicators should also keep an eye out for the new bee advisory box on pesticide labels. This addition addresses when products may be applied to minimize risk to pollinators.



APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.



Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.
This product can kill bees and other insect pollinators.

Living the Small Farm Dream: Small Farm Conference and Trade Show



Saturday, March 25

R.G. Drage Career
Technical Center
Massillon, OH 44646



REGISTRATION DEADLINE is MARCH 17th.

CONFERENCE COST:

Per Person: \$60.00

Students: \$30.00

Women in Agriculture (see below) +
Small Farm Conference: \$100.00
Students attending both programs: \$50.00

This intensive conference will give you the opportunity to choose from different seminars taught by Extension professionals and industry leaders on a wide variety of agricultural enterprises. Sessions cover a variety of topics, including horticulture, livestock, aquaculture, farm management, marketing & selling, natural resources, and equipment use & safety. A tradeshow representing the many industries servicing small farms will be present for you to visit during Saturday hours.

For more information, visit agmr.osu.edu/small-farm-programs. Brochures with registration forms are available at the Jefferson County Extension Office.

East Ohio Women in Agriculture Conference

Friday

March 24, 2017

9 A.M. – 4 P.M.

**R. G. Drage Career
Technical Center**

2800 Richville Drive SE
Massillon, OH 44646

\$55 adults/ \$30 Students

** Discount if also registered for
Small Farm Conference—see
above*

Who should attend:

Women who are interested, involved, or want to become involved in food, agriculture, natural resources, or small business.

Topics include: business & finance, crops & livestock, communication, home & family, as well as special interest presentations on renewable energy, beekeeping, preserving legacies, and farmers' markets.

How to Contact the Jefferson County Extension Team:

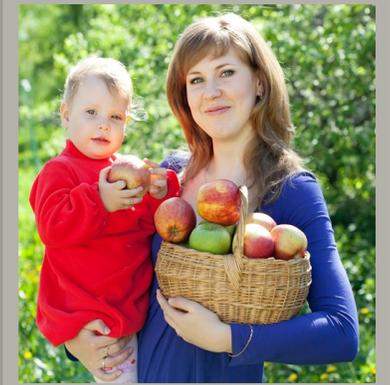
587 Bantam Ridge Road
Suite C
Wintersville, OH 43953

Website: jefferson.osu.edu
Phone: (740) 264-2212

Janine Yeske
County Director/
4-H Educator
Email: yeske.1@osu.edu

Erika Lyon
ANR Educator
Email: lyon.194@osu.edu

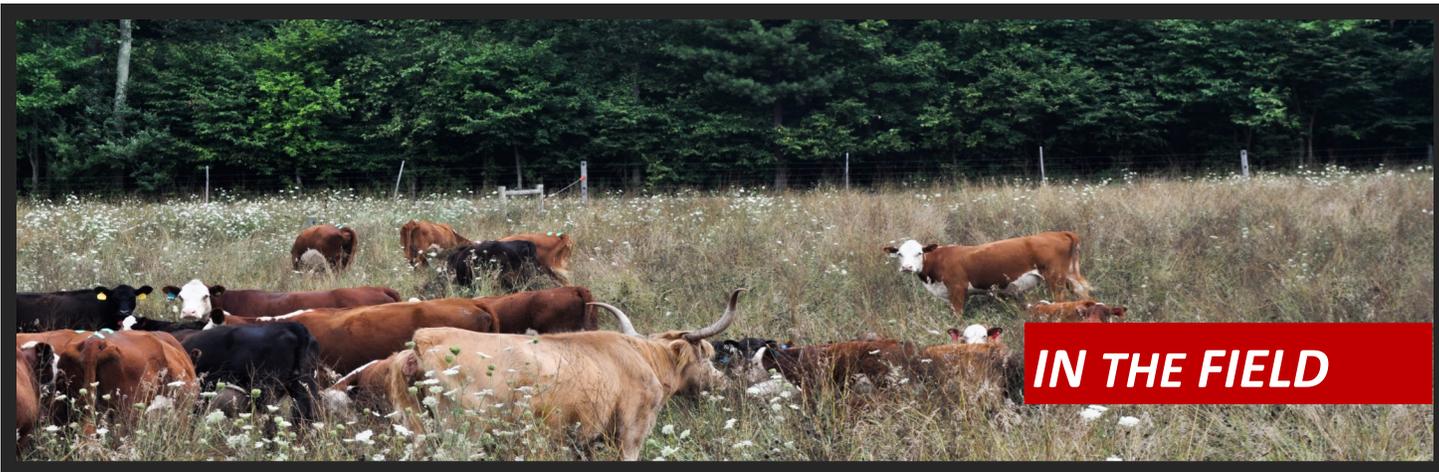
Cheryl Lightfritz
Office Associate
Email: lightfritz.1@osu.edu



**Registration Deadline:
March 10**

For more information call 740-
622-2265
Visit jefferson.osu.edu for a flyer
with a complete schedule of
presentations

Register online with credit card at
[www.regonline.com/
womeninageast](http://www.regonline.com/womeninageast).



LIVESTOCK & WATER-ENVIRONMENT INTERACTIONS

By Steve Boyles, OSU Extension Beef Specialist

The water needs of livestock are filled from three major sources:

- (1) Free drinking water
- (2) Water contained in feed
- (3) Metabolic water produced by oxidation of organic nutrients

Water contained in or on the feed is extremely variable. It may range from a low of 5% in dry grains to about 90% in young, fast-growing grasses. In addition, the amount of dew or precipitation on the grass at the time of grazing is available as well.

Water losses by animals are principally through:

- (1) Urine
- (2) Feces
- (3) Evaporation from the body surface and respiratory tract.

In ruminants the loss of water through feces is equal to urinary losses. The high-fiber nature of ruminant diets requires more water to carry the ingesta through the gastrointestinal tract than for non-ruminants. Cattle feces contain 75-85% water, while sheep and goat feces have 60-65% water.

Expired air is over 90% saturated. When respiration rate increases in response to high temperatures or other behavioral stimulus, the rate of respiratory water loss is increased

There are large differences among species in the importance of sweating with domestic livestock ranked in the descending order of horses, donkeys, cattle, goats, sheep, and swine. The threshold skin temperature for sweating varies among species with cattle reacting at about 77° F

Factors Affecting Water Intake: Young calves generally have higher intakes of water per unit of weight than older cattle. During the last 4 months of pregnancy, cows may consume 30% more water than when dry and open. The estimated intake of free water for lactating cows is about 2 pounds of water per pound of milk produced. This could be an important factor in early calving herds where frozen water is an issue.

Frequency of Watering: When cattle on grazing have water available free choice, they drink 2 to 5 times per day. Water intake of sheep or cattle will decline as distance to water sources increases. Physical form of the diet influences water consumption. When the same forage crop was made into both hay and silage, Holstein heifers on the silage diet had higher total water intake (free + feed) and secreted more urine than heifers on hay alone.

Water Temperature: Findings on the effect of temperature on water intake are variable. Water temperature (assuming not frozen) does not appear to alter rate of digestion but there have been some reports on variation of animal performance.

Air Temperature: Under controlled temperature conditions it has been demonstrated that cattle tend to increase water intake as temperature rises with 81°F being the temperature where marked changes in intake by lactating cows is noted. Below that point water consumption is considered largely a function of dry matter intake.

Source: Effect of Environment on Nutrient Requirement of Domestic Animals. National Academy Press. <https://www.nap.edu/read/4963/chapter/1>

Related reading: Livestock and Water <http://agmr.osu.edu/sites/agmr/files/imce/pdfs/Beef/LivestockAndWater.pdf>

AVIAN INFLUENZA AND BIOSECURITY

By Mohamed El-Gazzar, DVM, MAM, PhD, DACPV, Assistant Professor and Poultry Extension Veterinarian, Ohio State University

It has been a little bit over 2 years since the beginning of the largest Highly Pathogenic Avian Influenza (HPAI) outbreak in North America (NA). The virus that caused such outbreak was genetically identified to be a mix between North American and Eurasian Avian Influenza (AI) viruses. Wild migratory birds are thought to play a prominent role in bringing that virus to NA. While the last case of commercial poultry from that outbreak was reported in late spring of 2015, AI continues to be a threat to the poultry population (commercial and noncommercial) in NA. The clearest evidence of that threat materialized in another HPAI outbreak in January of 2016 that affected the commercial poultry industry. Different from 2015 outbreak, the 2016 outbreak evolved from a purely NA virus. It also seems that the Eurasian virus did not disappear from NA; as it has been isolated from wild mallard ducks in two different occasions from two different locations (Alaska, August and Montana, December) in 2016.

As mentioned before, the 2015 Influenza virus that resulted in the death of close to 50 million birds in the United States was genetically related to an influenza virus that circulated in Asia and Europe throughout 2014. Interestingly, during 2016 a very similar virus is currently very active throughout Asia, Europe and Africa. According to National Wildlife Health Center report, that was issued in December 2016 "... [this] virus was reported in wild birds in Russia (during summer) and India (during autumn). Additional outbreaks have subsequently been reported in a growing list of European countries (Austria, Croatia, Denmark, Finland, France, Germany, Hungary, the Netherlands, Poland, Romania, Serbia, Sweden, and Switzerland) and three countries in the Middle East (Egypt, Israel and Iran). Infected domestic animals have included chickens, ducks, and turkeys; affected wild birds have included at least 16 species of waterfowl, five species of gulls and terns, four species of raptors, two species of grebes, as well as a coot, cormorant, crow, heron, and moorhen".

It is important to note that to date, the domestic poultry population (commercial and noncommercial) in the United States is still clear of this virus. However, this situation in Europe and Asia is frighteningly similar to what happened in 2014. It is also important to note that in spite of being deadly to poultry, this group of influenza viruses has NOT been reported to infect humans, neither in the United States nor in other parts of the world.

While surveillance and quick diagnosis are essential tools to detect the virus and limit the spread of the disease and eventually control the outbreak, it's the BIOSECURITY efforts that will prevent the infection from reaching your flock, whether it is commercial or noncommercial. Biosecurity can be defined as "the sound sanitary practices that are used to stop the infectious agent from reaching the host". Infectious agents are mostly microscopic in nature (cannot be seen by the naked eye). That means that it is very difficult to detect their movement and transmission from one place to another or from one individual to another. So the only option we have to stop their transmission is to put barriers in the face of these microbes to protect our poultry flocks, even though we can't see them. In case of Avian Influenza and other microscopic infectious disease agents, these "biosecurity" barriers can be physical or chemical. Examples of physical barriers include, fences, gates, enclosed poultry houses, or even washing and cleaning. On the other hand, chemical barriers include disinfectants and detergents that are used to kill these microbes. Read more at <http://go.osu.edu/BqJ7>.



OSU Beef Cattle Artificial Insemination School

By Clif Little, ANR Educator, Guernsey County

Ohio State University Extension and the OSU Eastern Agriculture Research Station (EARS) in Belle Valley will be offering beef cattle artificial insemination (A.I.) school April 25, 26, & 27, 2017. Classes will run from 9 a.m. to approximately 2 p.m. each day at EARS. Producers will learn the basics of utilizing Expected Progeny Difference (EPD's), techniques for artificial insemination, semen handling, reproductive anatomy and physiology and estrous synchronization. On the third day the class will practice artificial insemination. The cost of the class is \$100 which covers all materials and lunch. Registration is required by April 21, class is filled on a first come first serve basis and is limited to 20 participants.

For more information contact Clif Little or the Guernsey County Extension office at little.16@osu.edu or 740-489-5300.

Warm Winters & Insect Survival

By Joe Boggs, OSU Extension,
Commercial Horticulture

Milder than average winter temperatures in southwest Ohio are continuing with daily high temperatures forecast to reach the mid-60's over the next seven days; some prognosticators are predicting that records may fall. Our consistent above average temperatures this winter have ignited questions about whether or not we will suffer higher than average numbers of insect pests.

There is no concise sound bite or tweet-worthy answer. It's complicated by the wide ranging strategies used by insects to successfully deal with winter conditions. The answer is made even more complicated because evolutionary selective advantages that reward one strategy over another haven't been consistent across taxonomic groups. So, we can't say that all beetles deal with winter in a certain way, or all flies, or all bees, etc. Questions spawned by warm winters are at the opposite end of those that arise from winters dominated by lower than average temperatures, but the same principles apply.

At one end of the spectrum are insects that clearly benefit from warmer than average winters in Ohio. Goldenrain Tree Bugs (*Jadera haematoloma*) appeared in large numbers on their namesake host in southern Ohio during the 2012 and 2013 growing seasons. This native insect is common in Florida where it feeds on the seeds of plants in the soapberry family. However, they disappeared from Ohio during the winter of 2013-14. Populations of the Common Bagworm (*Thyridopteryx ephemeraeformis*) were also decimated. The rise and fall of these insects in relation to warmer or colder than average winter temperatures adds support to the perception that a warm winter means more insect pests. Of course, the winter survival of these insects was based more on luck than evolutionary advantage. This is not the case for most of our Ohio insect pests.

Some southern insects give up the ghost in Ohio during even our mildest winters, but they reappear in our state in the spring or early summer by being blown north from their southern winter enclaves. Potato Leafhopper (*Empoasca fabae*) is the poster child for this seasonal repopulation strategy. The hoppers spend the winter enjoying the sunny south but mated females are wafted north on storm fronts in the spring to establish damaging populations. Neither colder than average nor warmer than average Ohio temperatures will have an effect on this pest. At least thus far; perhaps climate change will change this.

Other insects handle Ohio winters by seeking over-wintering locations where temperatures remain moderate. However, this may be a risky proposition. All insects are cold blooded (ectothermic) meaning that their body temperature and thus their metabolic rates depend on external heat sources such as sunlight, heated surfaces, or ambient air temperature. Insects that spend the winter hiding from the cold prepare themselves by accumulating fat in the fall then they live off the fat through the winter. A warm winter may mean they can literally starve to death because they are not feeding and high temperatures increase their metabolism causing them to consume their fat reserves. Multicolored Asian Ladybeetles (*Harmonia axyridis*) and Brown Marmorated Stink Bugs (*Halyomorpha halys*) commonly seek protected overwintering quarters in the walls or attics of our homes.

Never Too Early To Begin Tracking Growing Degree Days (GDD)

By Amy Stone, OSU Extension Educator,
Lucas County

A recorded breaking warm-up in January is just a memory. While temperatures are feeling a bit more winter-like, it is not too earlier to begin following the Growing Degree Day Calendar online at www.oardc.ohio-state.edu/gdd/

A quick check earlier today showed that Toledo had accumulated 16 GDD units in 2017. Do you know what is happening in your part of the state? Check it out today!

Once at the website, all you will need is an Ohio zipcode! After entering your Ohio zip code, click on "Show me the Calendar" button, and you will be taken to the website's calendar page that will include the GDD, first and full bloom of plants and pest activity.

Once I see where we are in the GDD accumulation, I like to manipulate the date and see where we were a year ago, five years ago, or somewhere in between. For example, in 2016 we were at 3 GDD and in 2012 we were at 6 GDD. While there aren't usually large differences this early in the season, it is something to explore and watch as temperatures warm impacting both the development of flowers and insect pests.

Have fun exploring the phenology calendar now and explore ways to incorporate this tool in 2017 if you haven't already been using it.

For More Info:
The Ohio State University Phenology Calendar
<https://www.oardc.ohio-state.edu/gdd/>



WARM WINTERS CONTINUED...

Rather than depending on finding a protected location in the fall, some insects enter the winter in protected packaging of their own making. Eastern Tent Caterpillar (*Malacosoma americanum*) moths produce eggs that appear to be surrounded by bubble wrap. No doubt the air in the hollow structures surrounding the eggs provides some insulating protection against cold temperatures. Since they are protected against the cold, warm winter temperatures would just be icing on the cake. On the other hand, common bagworms overwinter as eggs protected by both their bags and the dead bodies of females. However, research has shown the eggs are subject to low temperature mortality with 50% of the eggs killed if exposed to 6.8F.

Some insects are simply unaffected by even our coldest Ohio winters because they can protect themselves with antifreeze; literally! It's not cold temperatures that kill insects, it's sharp-pointed ice crystals that form below 32F to pierce and destroy cells that kills insects. Insects may rely on a wide range of chemicals that lower the freezing point of their blood (hemolymph) to prevent the growth of spiky ice crystals. This includes ethylene glycol, the same chemical we use as antifreeze in our cars. Of course, this ability means a warmer than average winter has little impact because even a colder than average winter does not kill these insects.

Finally, some insects dodge the winter bullet by employing several strategies including diapause. This is a physiological state that's much deeper than hibernation. The insect's metabolism slows way down – regardless of temperature – and does not return to normal until the insect experiences certain environmental cues that cause it to come out of diapause. If the insect combines diapause with producing antifreeze, finding a protected location, or making their own protection, it will substantially increase the insect's success rate with handling winters one way the other.

Gypsy Moth (*Lymantria dispar*) spends the winter as diapausing 1st instar larvae inside eggs beneath a protective covering of scales deposited by the females. Research has revealed that this combination of overwintering strategies has its limits with the larvae being killed if temperatures of -20F last from 48 to 72 hours. However, warmer than average winter temperatures does not mean we will see a higher than average number of gypsy moths; it just means this low temperature threshold (which would be rare for much of Ohio) was not experienced. Indeed, research has shown that pathogens, predators, and parasitoids usually have a greater impact on gypsy moth numbers compared to just cold or warm winter temperatures.

The bottom line is that overwintering strategies of insects are varied and complicated meaning that we can't paint with a broad brush to predict what effect, if any, our balmy winter temperatures will have on insect pests. This early season question is much like the late season call for predicting fall colors. About all we can say with certainty is that we will have insect pests during the upcoming growing season regardless of winter temperatures ... and leaves will change color at the end of the season.

Photo of gypsy moth caterpillars



Jefferson/Harrison Master Gardener Volunteers Seed Giveaway

Wednesday, March 15th

Steubenville Public Library—
Toronto (1:00pm) & Schiappa
(3:00pm) Branches

Interested in growing (and learning) something new this year in the garden? Michele Mack, Jefferson/Harrison Master Gardener will be at the Steubenville Libraries on March 15th to answer your seed germination and biology questions (and hand out seeds, of course).



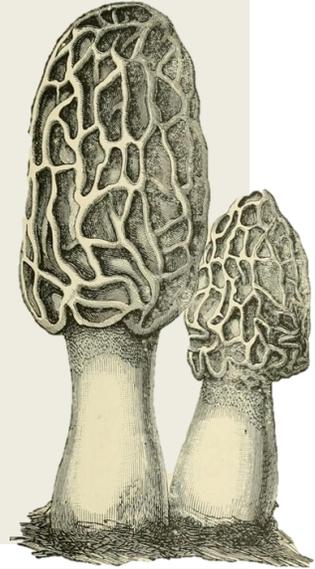
MARCH TO MAY MEANS MORELS...

...if you know where to look. Morels are fungi whose growth is often associated with dead elms and ash trees, but they can also be located wherever conditions allow. Moisture is a critical factor in this mushroom's life cycle. Rainfall in the months leading to morel season can lead to a mass appearance of mushrooms in the spring. Likewise, a dry winter may mean it will be a poor year for morels. But it is not just rainfall. Soil drainage also impacts mushroom growth. Organic matter build up can provide the ample conditions needed for mycelium, a mass of thread-like hyphae that makes up a mushroom, to grow. Cold winters followed by warm springs also create a favorable environment for our friend. At the time of year when plants begin to bloom or produce leaves, the hunt is on!

But where to begin? You may have to do some extensive searching and you may (or may not) be rewarded. If you do find a morel, write down the date, time, tree species in the area, air and soil temperatures, what's in bloom, precipitation, type collected, and GPS coordinates (or an approximation) of where you found the fungus. The more you become familiar with what to look for each year, the closer you become a local morel expert.

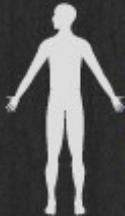
If you think you have found a morel, be careful. False morels and stinkhorns are often misidentified as morels. A hollow stalk is usually a good indicator that the mushroom is a true morel. Use a good identification guide that can differentiate between morels and false morels. For stinkhorns, well, the smell usually gives those away (Don't stand downwind!).

Always, always, always use good etiquette. If allowed to hunt on another's property, share the rewards. When in the vicinity of other morel enthusiasts, give those folks some space. But if you find a good spot, there is no rule that you have to announce it to the world.



BEWARE OF FALSE MORELS

SYMPTOMS:



Fatigue
Dizziness
Vomiting
Diarrhea
Tremors



Check the stalk - is it hollow inside?
If yes, it is likely a morel
If no, well, better luck next time



The toxin produced by false morels is Gyromitrin

Gyromitrin is volatile, meaning it can be ingested or inhaled. If ingested, the toxin is converted to rocket fuel in the stomach.



Symptoms appear within 2 to 24 hours



Always use a good identification guide.



Damage to liver, kidneys, and blood cells may occur



When in doubt, don't eat it!

SPRING CALENDAR

March

- 3/7 Fertilizer Certification @ Bantam Ridge School, Wintersville, 6:00pm-9:00pm
Conservation in Your Backyard @ Puskarich Public Library, Cadiz, 6:00pm-8:00pm
- 3/9 Farm Tax Workshops @ Barnesville Library Annex, Barnesville, 12:00pm-2:30pm | @ OSU Extension Office, Guernsey Co., 7:00pm
- 3/13 Jefferson County Farm Bureau Oil & Natural Gas Meeting @ Bantam Ridge School, Wintersville, 7:00pm
- 3/21 Master Gardener Fruit Tree Pruning Workshop @ Packers Orchard, 10:00am
- 3/23 Eastern Ohio Grazing Council Winter Meeting @ Friendship Center, Carrollton, 6:00pm
- 3/24 Women in Agriculture Conference @ RG Drage Technical Center, Massillon
- 3/25 Small Farms Conference @ RG Drage Technical Center, Massillon
- 3/27 Jefferson County Beekeepers Association Meeting @ JVS, 7:00pm

April

- 4/4 Conservation in Your Backyard @ Puskarich Public Library, Cadiz, 6:00-8:00pm
- 4/8 Morels & Edible Mushrooms Workshop @ Steubenville Public Library, Schiappa Branch 10:00-12:00pm
- 4/18 New Private Pesticide Applicators Testing @ Bantam Ridge School 1:00pm
- 4/24 Jefferson County Beekeepers Association Meeting @ JVS, 7:00pm



Outdoor Photo Tips: DARK SPACES

Taking photographs in dark settings is one of the most challenging and fun activities in photography. The settings you typically use in daylight or under brighter conditions become redundant when the lights go out. If you want to capture a great shot in the dark, you have to learn a little more about your camera.

Photographing dark situations means that you will have to use a long exposure—that is, keeping the shutter open anywhere from a few seconds to a few hours. Not all cameras can do this, so make sure you check your camera's manual. Since limited light is available to reach a camera's sensor, you will also want to adjust the aperture, or the size of the lens opening, to the widest possible setting (low f-stop number) to let more light into the camera. Think of when you walk into a dark room—your eyes adjust to the lack of light by letting your pupils expand to capture as much light as possible. (This does not translate into night vision, however, so carry a flashlight when in dark settings).



EXTENSION'S MOST WANTED...

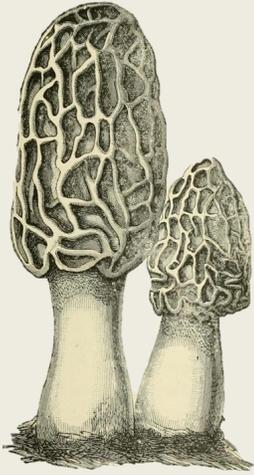


The Spotted Lantern fly is a recent invasive of Pennsylvania that causes damage to fruit and spruce trees. It has not yet been found in Ohio, and we hope to keep it that way. Please report any sightings or specimens of this pest to your local Extension office.

Palmer amaranth is an invasive that has been found in counties surrounding Jefferson. Control works best early in the growing season, but unfortunately this plant does not stand out until it is too late. When in doubt, have OSU Extension check it out!



Bruce Ackley, The Ohio State University, Bugwood.org



INTRODUCTION TO HUNTING MORELS & OTHER EDIBLE MUSHROOMS

Saturday
April 8th, 2017
10 a.m.—12 p.m.

Steubenville Public Library,
Schiappa Branch
4141 Mall Drive, Steubenville

Love fungi? Want to learn more about finding morels and other edible springtime mushrooms out this month? The Ohio State University Extension, Jefferson County is having a mushroom workshop that covers the ecology, identification and safe collection of morels and friends. Cost of the program is \$5.00 to cover educational materials, and pre-registration is required. Make checks payable to Ohio State University Extension and send to 587 Bantam Ridge Road Ste. C, Wintersville, OH 43953. For questions about the program or to register, call 740.264.2212 or email lyon.194@osu.edu. Registration deadline is Friday, March 31st.



Conservation in Your Backyard Workshops



March signals the start of Conservation in Your Backyard (formerly Backyard Food Production) monthly workshops. Join us for sessions covering a range of topics, including tree planting, lawn care, backyard chickens, and much more! These workshops are free to attend, but contact the Harrison SWCD or Extension so we know how many to expect.



LOCATION

TUESDAY
MARCH 7th, 2017
6 p.m. - 8 p.m.

Puskarich Public Library, Cadiz

TUESDAY
APRIL 4th, 2017
6 p.m. - 8 p.m.

March Topics
Tree planting, site selection of trees, seed selection & libraries, and grafting

April Topics
Backyard poultry, small scale garden layout, wildlife management

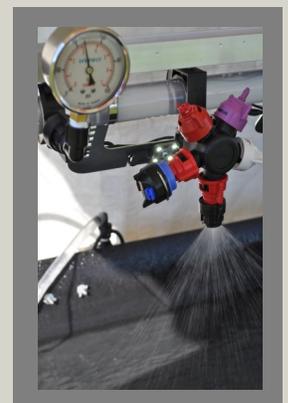
Private Pesticide Applicator Testing Location

Tuesday
April 18th, 2017
1 p.m.

Ohio State University Extension,
Jefferson County Office

To sign up, new applicators will need to complete an application, pay a \$30 license fee, and register with the Ohio Department of Agriculture online at <http://www.agri.ohio.gov/apps/odaprs/pestfert-prs-ols.aspx?ols=rg>

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



Tax Issues for Landowners & Possibility of Sudden Wealth

Speaker:

David Marrison

Dave is an Extension Educator in Ashtabula County who specializes in Farm Succession Planning, Ag Business Planning, Oil, Gas, and Farm Tax Management. Dave is also co-leader of the OSU Ag Manager Team

Ohio Ag Manager – blog address

<https://u.osu.edu/ohioagmanager/>

The Ohio State University Extension, Belmont & Monroe Counties will host a **Tax Issues for Landowners Meeting at:**

Barnesville Library Annex

611 North Chestnut St., Barnesville, OH 43713

March 9, 2017

12:00 to 2:30 p.m.

Pre-registration is required for lunch, seating and handout preparation.

Tax program

Registration: \$5.00 per person includes lunch & handouts (cash or check only)

Checks: make payable to OSU Extension

For more information and to register contact:

***Mark Landefeld, OSU Extension-Monroe County,
101 N. Main St., Woodsfield, OH 43793 - (740) 472-0810
or***

***Dan Lima, OSU Extension-Belmont County,
101 N. Market St., St. Clairsville, OH 43950 - (740) 695-1455***

Farmland Tax Workshop

Thursday, March 9, 2017

7:00 pm

OSU Extension Office, Guernsey Co. Fairgrounds, Old Washington

Tax Management will be presented by David Marrison, OSU Tax Specialist. He will discuss important aspects of farm tax management, royalty payments, depreciation, pipeline payments, and other important farm tax changes.

Cost: \$5 per person

Pre-registration is required by March 6, 2017

For more information, contact Clif Little at 740.489.5300



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

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.

Roger Rennekamp, Associate Vice President for Agricultural Administration; Associate Dean, College of Food, Agricultural, and Environmental Sciences; Director, Ohio State University Extension; and Gist Chair in Extension Education and Leadership.

Get your newsletter in color and help us save a tree! Sign up for electronic newsletters by sending an email to lyon.194@osu.edu

