



OHIO STATE UNIVERSITY EXTENSION

# ANR EXTENSION CONNECTION

Agriculture & Natural Resource news and events for Jefferson County

September-October, 2018

## Warmer temps predicted for fall...

Chances are autumn will be a warm one this year. According to the National Weather Service Climate Prediction Center, forecasts for September to November are predicted to be above normal. This means that you may have to wait just a little longer to see the spectacular fall foliage here in Jefferson County.

While warmer temperatures may mean an extended growing season, it may also mean that some plants may not be able to harden off in time for winter. If there are large fluctuations between day and night temperatures, trees will be at greater risk of bark injury. The best way to mitigate these effects is to make sure plants are healthy to begin with. Have your soils tested to know what nutrients are available for plants, and keep plants adequately watered. When purchasing trees, make sure to select varieties that have stronger wood and structure.

While we are sad to see summer end, we are excited for fall to begin here at the Extension office. Farm Science Review is only a few weeks away, and tickets are now on sale! Check in with our office to see about purchasing tickets ahead of time to receive the discounted admission rate.

Have a colorful fall!



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



### THIS ISSUE

- Greetings
- Fall grazing
- Understanding soil balancing
- Autumn garden activities
- Farm Science Review
- Master Gardener Training & Events
- Events
- Calendar
- Extension's Most Wanted



## GOOD MANAGEMENT PRACTICES FOR FALL GRAZING

By Ted Wiseman, OSU Extension Educator ANR, Perry County  
(Previously published in Farm and Dairy: August 9, 2018)

Fall pasture management is a critical period for pastures. For many of us we have had adequate rainfall up until recently and pastures have done well to this point.

As we transition into late summer and early fall it is critical to pay close attention to your forages. Some pastures may be stockpiled, but those intended to be grazed this fall still need time to rest.

It's very tempting to use those forages that green up late in the fall. Management decisions made this fall will greatly impact forage growth next year.

### Fall activity:

During the fall, forages are doing a couple of things, such as root regeneration and forming new shoots or growing points. We only see the growing leaves of the plants; one must consider the other half of the plant which is below ground.

During the growing season, the leaves are feeding the entire plant. If we remove too much of the leaves we are reducing the plant's ability to produce carbohydrates through photosynthesis.

These carbohydrates are stored, for the most part, in the crown of the plants compared to the roots. During times of drought, plants will shed roots.

Shorter roots reduce the ability to take in moisture and nutrients. Even with fertilizer applications shorter roots are less productive.

Overgrazing results in shorter leaves reducing the plant's rate of carbohydrate production. Carbohydrates are stored in the crown of the plants which is generally in the lower 3 to 4 inches of the plant for most cool-season pastures.

This is why recommendations are to leave stubble heights no lower than 4 to 6 inches, either from grazing or by mowing. In the fall these crown tillers are brown or dormant often thought to be dead.

These crowns not only provide nutrients for the new growth but provide physical protection from extreme weather conditions.



Early fall is an ideal time to take soil samples. Based upon the results you can apply the recommended rates of lime or fertilizer. This will also help in root regeneration and re-growth.

### Fertilizer application:

Nitrogen application in the fall along with adequate moisture will increase pasture growth. Generally, no more than 40 to 50 pounds of nitrogen should be applied.

Typically in our area, fertilizer applications should be made no later than the first of October. High nitrogen applications will keep the plants from starting the overwintering process.

Too much nitrogen too late could result in winter damage due to the excessive growth reducing sugar concentrations in the stubble.

Proline is what protects plant cells from winter damage or death. If not enough time is allowed or too much nitrogen is applied the plant does not have enough time for this process to occur.

Scouting pastures this time of year and giving plants enough time to store carbohydrates in the fall is critical for long-term productivity.

So don't be greedy and keep an eye on stubble height and use those soil test results to make economic decisions to make your pastures productive for many years.

## How to Contact the Jefferson County Extension Team:

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## BUILDING A SHARED UNDERSTANDING OF SOIL BALANCING

By Matt Kleinhenz, Professor, Dept. of Horticulture & Crop Science, OSU

Everyone would welcome a holistic, reliable, and relatively straightforward way to enhance and maintain soil health on many farms, regardless of their size, product, management approach (conventional, organic) and other characteristics. Some farmers and consultants have long said that Soil Balancing (SB) is that way, a means to loosen and enliven soil, provide essential nutrients, limit weed problems, and enhance crop yield and quality. However, university researchers have largely been unable to support that overall claim or recommend Soil Balancing as the guiding philosophy when making soil, fertility, weed, and certain crop management decisions. With USDA support and the help of many growers, consultants, and others in the industry, an OSU team has been taking another look at the situation, possibly the most comprehensive, collaborative, and long-running evaluation to date.

As outlined in three previous VegNet articles and other references on SB, the philosophy calls for achieving an optimum ratio of calcium, magnesium, and potassium in the soil. This may require large amounts of limestone and/or gypsum and multiple years to “move the needle” on soil chemistry, physics, and biology (and their follow-on effects on weeds and crops) in a positive direction. Regardless, some see the payoff as significant. Importantly, evaluating the economics of Soil Balancing is one component of the OSU-led effort, which began in 2015 and is set to provide valuable new insights. Look for summaries in upcoming publications, programs, and other resources.

For more information, see <https://u.osu.edu/vegprolab/research-areas/soil-balancing/> or <http://organicfarmingresearchnetwork.org>, [ohio-state.edu/network\\_activities/soil\\_balancing/](http://ohio-state.edu/network_activities/soil_balancing/) or contact Matt Kleinhenz (330.263.3810; [kleinhenz.1@osu.edu](mailto:kleinhenz.1@osu.edu)). To read the VegNet newsletter, visit [u.osu.edu/vegnetnews](http://u.osu.edu/vegnetnews).



## AUTUMN GARDEN ACTIVITIES

By Erika Lyon, OSU Extension, Jefferson & Harrison Counties

Although gardening may not be on the mind as much at this time of year compared with the spring, fall is still a great time for gardening. Weather, of course, dictates when you can get items done on your to-do list, but getting a jump-start now will save you time and energy come spring.

Below are lists of items that can get done during the months of September and October. Visit <https://web.extension.illinois.edu/hkmw/downloads/65434.pdf> for a full calendar of gardening tasks September to November.

### September

- Remove annual weeds
- Clean-up beds. Do not compost diseased or infested plants.
- Plant flowers like pansies and mums for garden color.
- Divide, move, and plant flowering perennials. Keep track of where these are planted for spring.
- Plant and water new trees and shrubs. Do not fertilize or prune these plants at this time!
- Restock bird feeders for migrating birds.
- Record data from the 2018 season—what worked? What did not work? Take photos and develop a plan for next year.
- Plant radishes, lettuce, and other fall crops.
- Seed, sod, fertilize lawns

### October

- Continue to maintain beds for next year.
- Plant spring-flowering bulbs.
- Dig up and store dahlias, gladiolas, and cannas after first frost.
- Cut back tall perennials to prevent wind damage—others can wait until spring.
- Keep newly planted trees and shrubs watered until frost.
- Till, add organic matter to vegetable garden, and/or plant a cover crop.
- Move herbs indoors.
- Now is the time to plant garlic for the spring.
- Harvest root crops and Brussel sprouts.
- Control broadleaf weeds.
- Reduce water and fertilizer in house plants.
- Pot spring bulbs to produce blooms in winter.

# 2018 FARM SCIENCE REVIEW



**Tickets on sale now!**

## SEPTEMBER 18<sup>TH</sup>-20<sup>TH</sup>: FARM SCIENCE REVIEW—LARGER EXHIBIT AREA, EASIER ACCESS

LONDON, Ohio — Visitors to the 56th annual Farm Science Review, the premier outdoor agricultural education and industry trade show Sept. 18-20, will walk away with advice they can use to improve their farm operation, large or small.

The exhibit area is now 20 acres larger, and improvements have been made so visitors can better access parking as well as the exhibits and other offerings at the Molly Caren Agricultural Center in London. Farm Science Review is sponsored by the College of Food, Agricultural, and Environmental Sciences (CFAES) at The Ohio State University.

“We think these improvements will make a big difference to visitors,” said Nick Zachrich, Farm Science Review manager.

“With close to 130,000 people coming to the show every year, we want to make it as safe and as easy as possible to enter and exit.”

One improvement involves relocating the “Ride and Drives,” where attendees can test drive farm equipment and vehicles from participating exhibitors. The new location puts these immediately inside the east gates near the Ohio State University Extension Agronomic Crops Team display and the antique tractor clubs. OSU Extension is the outreach arm of CFAES.

Visitors to the annual event are able to peruse 4,000 product lines and over 700 commercial and educational exhibits as well as engage in workshops, presentations and demonstrations delivered by CFAES experts.

“Anyone involved in agriculture, whether you have a backyard garden to feed your family or thousands of acres, will find products, services and knowledge from exhibitors and CFAES experts to improve your operation,” Zachrich said.

Educators, specialists and faculty from CFAES will provide research-based information on issues from pest management to water quality. Field demonstrations will feature the most current technology and agricultural techniques.

Tickets are \$7 online, at OSU Extension county offices and participating agribusinesses, and \$10 at the gate. Children ages 5 and under are free. Details on event hours, buying tickets online and more are on the Review’s website at [fsr.osu.edu](http://fsr.osu.edu).

### What’s up at the Small Farms Center Tent?

#### Tuesday, September 18

10:00 a.m. Cover Crops—The Basics for New Growers  
11:00 a.m. Commercial Hops and Barley Production in Ohio  
Noon Agronomic Management of Winter Malting Barley  
1:00 p.m. Health and Disease Prevention on Cow–Calf Operations  
2:00 p.m. Navigating Farm Business Ventures

#### Wednesday, September 19

10:00 a.m. Small Farm Impacts from and Adaptations to Climate Change  
11:00 a.m. GMOs and Gene Editing—Fact and Friction  
Noon “F.A.R.M.—G.I.R.L.S”  
1:00 p.m. Preventing Disease Transmission Between Pigs and People  
2:00 p.m. Zoonotic Diseases: Protecting Yourself from Your Animals

#### Thursday, September 20

10:00 a.m. Designing Accessible AgriTourism: Welcoming Visitors of All Abilities  
11:00 a.m. When Tragedy Strikes on the Farm— Are You Prepared?  
Noon Is Your Soil Alive?  
1:00 a.m. Getting Into Beekeeping  
2:00 a.m. SARE Grant Program

### WHERE TO PURCHASE FSR TICKETS IN JEFFERSON COUNTY

- ◆ Jefferson Landmark—1525 State Route 152, Bloomingdale, OH 43910
- ◆ Jefferson County Farm Bureau, 587 Bantam Ridge Road Suite B, Steubenville, OH 43953
- ◆ OSU Extension Jefferson County, 500 Market Street, Suite 512, Steubenville, OH 43953

**To view schedules for all FSR locations in London, OH, visit [fsr.osu.edu](http://fsr.osu.edu) or your local Extension office. There will be something for everyone!**

# CFAES

OHIO STATE UNIVERSITY EXTENSION

Jefferson & Harrison

# MASTER GARDENER VOLUNTEERS

The Ohio State University Extension offices in Jefferson and Harrison Counties are currently accepting new applications for the Master Gardener Volunteer training program for residents of both counties. Master Gardener Volunteers in Ohio contributed over 180,000 hours of service in 2015 and offer assistance with home horticultural questions, pest identification, school programs, demonstrations, research, and continuing education programs.

Training sessions will begin in October and continue into November. Participants interested in receiving the 50 hour intensive training will learn about basic botany, plant physiology, soils, entomology, plant pathology, plant diagnostics, integrated pest management, pesticide use and safety, lawn care, home vegetable and fruit production, backyard wildlife management and much more! Working with county Ohio State Extension personnel, Master Gardener Volunteers provide educational services to their communities. If you are a garden enthusiast, this is a great opportunity to share your gardening know-how and skills with others in your community.

**TUESDAYS,  
October 2<sup>nd</sup> –  
November 13<sup>th</sup>  
8AM-3PM**

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

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

*Deadline for registration is August 15<sup>th</sup>. Interviews will be held the first week of September.*

Call 740-264-2212 or send an email to [lyon.194@osu.edu](mailto:lyon.194@osu.edu) for more information.



**THE OHIO STATE UNIVERSITY**

COLLEGE OF FOOD, AGRICULTURAL,  
AND ENVIRONMENTAL SCIENCES

[jefferson.osu.edu](http://jefferson.osu.edu)

[harrison.osu.edu](http://harrison.osu.edu)

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



OHIO STATE UNIVERSITY EXTENSION

## 2018 MASTER GARDENER VOLUNTEER TRAINING SCHEDULE



Dates	Locations	Topic
Tuesday, October 2 <sup>nd</sup>	Jefferson County Extension Office 500 Market Street, Suite 512 Steubenville, OH 43952	<b>Welcome!!</b> Get Acquainted, responsibilities, working with the public, communication skills, research Garden Myths & Legends Basic Botany & Plant Biology
Tuesday, October 9 <sup>th</sup>	Hopedale USDA Rural Development 49014 Old Hopedale Road, Hopedale, OH 43976	Soils & Soil Health Composting Backyard Fungi
Tuesday, October 16 <sup>th</sup>	Puskarich Public Library 200 E Market Street, Cadiz, OH 43907	Entomology Plant Pathology & Disease Diagnostics Integrated Pest Management & Pesticide Safety
Tuesday, October 23 <sup>rd</sup>	Jefferson County Extension Office 500 Market Street, Suite 512 Steubenville, OH 43952	Plant Propagation & Greenhouse Tour Houseplants Tomato Grafting
Tuesday, October 30 <sup>th</sup>	Tappan Lake Park, 84000 Mallamee Rd, Deersville, OH 44693	Herbaceous Ornamentals Woody Ornamentals Backyard Wildlife Pollinators
Tuesday, November 6 <sup>th</sup>	Black Sheep Vineyard 1454 US-250, Adena, OH 43901	Vegetable Production Growing Herbs Large & Small Fruit Production
Tuesday, November 13 <sup>th</sup>	Harrison County Fairgrounds Commercial Building 550 Grant Street, Cadiz, OH 43907	Lawns Therapeutic Horticulture Invasive Species

Applications can be found at <http://go.osu.edu/becomejeffharrmgv>

### Current Volunteer Projects in Jefferson & Harrison Counties

*Master Gardeners @ the Farmers' Gateway Market  
Farm-to-School Programs at Pugliese, Stanton, and Harrison Hills  
Seed Library  
Hopedale Demonstration Garden  
Community Garden Education  
Spring & Summer Garden Programs @ a Library Near You*





# Master Gardener Volunteers at the Farmers' Gateway Market!



The Farmers' Gateway Market will wrap up in October, which means that time is running out to visit with the Master Gardeners to get your questions answered on backyard fruit, vegetable, and flower production.

WEDNESDAY

**SEPTEMBER 5th, 2018**

4:30PM—6:30PM

### Soil Testing

*\*Bring your questions on soil quality and health.*

*First ten people to visit the booth will receive a free soil testing kit!*

WEDNESDAY

**SEPTEMBER 19th, 2018**

4:30PM—6:30PM

### Sustainable Living

*\*Learn how to be sustainable and produce your own food at home!*

WEDNESDAY

**OCTOBER 3rd, 2018**

4:30PM—6:30PM

### Seed Libraries

*\*Learn about how to collect and store seeds. This event includes a seed giveaway!*



## AND AS A REMINDER...

### 2018 OSU Bee Lab Webinars

By Denise Ellsworth, OSU Department of Entomology



Source: Pixabay

Webinars are at 9:00AM Eastern, typically on the third Wednesday of the month. All webinars are free, and no registration is required. To join a webinar, follow the link below and LOG IN AS A GUEST at about 8:55AM the day of the event: <http://go.osu.edu/theOSUbuzz>. To access the webinar through a phone, iPad or other device, download the Adobe Connect app and join through the link.

If join our Bee Lab contact list, you'll receive reminders about these and other workshops we offer. Select the "beekeeping" list to receive webinar reminders, and/or "Ohio Workshops" to learn about in-person programs. Visit <http://u.osu.edu/beelab/> for recordings.

2018 Bee Lab Webinar Series (60 minutes well spent!)

**April 18, Olivia Carril, author and biologist: Identifying Common Bees of the Great Lakes Region**

**May 16, Reed Johnson, OSU Entomology: Where are Honey Bees Foraging in Ohio?**

**June 20, Kim Flottum, author and editor of Bee Culture Magazine: Ethics in Beekeeping**

**July 18, Alex Zomchek, Master Beekeeping Instructor: Insect/Animal Husbandry – What You Do and Don't Do Matters!**

**August 15, Elizabeth Long, OSU Entomology: Protecting Pollinators from Pesticides**

**September 19, Kelley Tilmon, OSU Entomology: Pollinator Diversity in Ohio Soybeans**

**October (date TBA), Randy Mitchell, The University of Akron: The Ohio Bee Survey: In Search of the Rusty Patched Bumble Bee**



*Eastern Ohio  
Grazing Council*

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

## SPRING GRAZING MEETINGS & PASTURE WALKS

**September 28th & October 25th**

6pm-8pm

Visit <http://www.carrollswcd.org/eastern-ohio-grazing-council.html> for more information. Flyers for EOGC events will be posted on [u.osu.edu/lyon.194](http://u.osu.edu/lyon.194).



## SOUTHEAST OHIO SHEEP & GOAT SCHOOL

**SEPTEMBER 6th & NOVEMBER 6th**

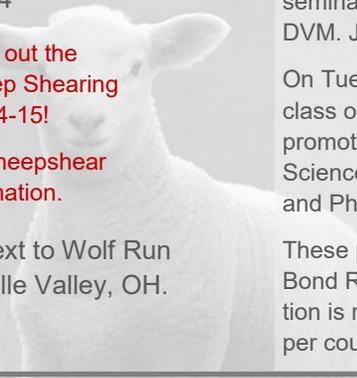
### @ the OSU Eastern Agricultural Research Station

16870 Bond Ridge Road  
Caldwell, OH 43724

Don't forget to check out the  
Ohio Statewide Sheep Shearing  
School September 14-15!

Visit [go.osu.edu/18sheepshear](http://go.osu.edu/18sheepshear)  
for registration information.

EARS is located next to Wolf Run  
State Park near Belle Valley, OH.



Southeast Ohio Sheep & Goat School continues this fall on Thursday, September 6 from 5:30 to 8:30 PM with a class focusing on improving reproductive success of sheep and goats through the use of synchronization, artificial insemination, semen testing, and pregnancy checking. The guest speaker will be DVM. Justin Kieffer- Clinical Veterinarian for OSU.

On Tuesday, November 6 from 6:00 to 9:00 PM the school will conclude with a class on finishing for market, carcass evaluation and meat grading, and how to promote these products to consumers. Speakers will be Dr. Lyda Garcia- Meat Science Professor for OSU, Brady Campbell- OSU Sheep Team Coordinator and PhD. Student, and Christine Gelley- Extension Educator for Noble County.

These programs are held at the Eastern Agricultural Research Station (16870 Bond Ridge Road Caldwell, OH 43724) and include a lamb dinner. Registration is required two weeks prior to the class. The cost is \$25 per person or \$40 per couple. Call 740-732-5681 to register.



## 2018 FALL BEEF SCHOOL

Beef School 2018 will consist of a three consecutive Tuesday evening classes beginning October 2, 2018 at the **Eastern Agricultural Research Station** (16870 Bond Ridge Road Caldwell, OH 43724). Classes will be held from **5:30 to 8:00 PM** and include a meal. The cost to attend is \$25 flat rate for one or all three classes combined. Call Guernsey County Extension at 740-489-5300 to register by September 24.

- October 2 will include Beef Quality Assurance Certification Training and Newborn Calf Care.
- October 9 will focus on farm costs and profits with sessions on identifying and framing key factors in the cost of production and the cost of replacement cows.
- October 16 will focus on forages and grazing with sessions on regenerating pastures after pipelines & winter feeding and improving water quality with forages.



## 2018 FALL BEEF QUALITY ASSURANCE

“Consumers are concerned for animal health, and the sustainability of the production systems their food’s raised in.”

That statement is just one of several discussed during the 2018 Ohio Beef School presentations that have caused teaching and certifying Ohio’s cattlemen in Beef Quality Assurance (BQA) to become a priority. Adding even more meaning to that statement is the fact that Tyson Foods, who harvest and process 25% of the US beef market share, and also Wendy’s, now the second largest fast food hamburger chain in the U.S., have both announced beginning in 2019 cattle they purchase must originate from producers and feedyards who are Beef Quality Assurance certified. Not only are today’s consumers sharing their concerns, but now the businesses who are supplying the public’s demand for a quality beef product raised in a humane and sustainable fashion also want some guarantees that it’s happening throughout the production chain.

In response, Ohio State University Extension is working in cooperation with the Ohio Beef Council, the Ohio Cattlemen’s Association and Ohio’s cattle auction markets and collection points to offer Ohio’s cattlemen several opportunities to become Beef Quality Assurance Certified.

**TO VIEW BQA TRAININGS ACROSS THE STATE, VISIT [U.OSU.EDU/ BEEFTEAM/EVENTS-PROGRAMS](https://www.osu.edu/beefteam/events-programs).**

BQA can also be completed online at <https://www.bqa.org/certification/ohio>.

## SEASON CALENDAR

### SEPTEMBER

- 9/5 Master Gardeners’ Table @ Farmers’ Gateway Market, Steubenville, 4:30pm-6:30pm
- 9/6 Southeast Ohio Sheep & Goat School @ Eastern Ohio Agricultural Research Station, Caldwell, 5:30pm-8:30pm
- 9/18-9/20 Farm Science Review @ Molly Caren Agricultural Center, London OH
- 9/19 Master Gardeners’ Table @ Farmers’ Gateway Market, Steubenville, 4:30pm-6:30pm
- 9/28 Eastern Ohio Grazing Council ([visit carrollswcd.org/eastern-ohio-grazing-council.html](http://visit.carrollswcd.org/eastern-ohio-grazing-council.html) for event details)

### OCTOBER

- 10/2 Master Gardener Training begins!
- 10/2 Beef School @ Eastern Ohio Agricultural Research Station, Caldwell, 5:30pm-8:00pm
- 10/3 Master Gardeners’ Table @ Farmers’ Gateway Market, Steubenville, 4:30pm-6:30pm LAST ONE OF 2018!
- 10/9 Beef School @ Eastern Ohio Agricultural Research Station, Caldwell, 5:30pm-8:00pm
- 10/9 Beef School @ Eastern Ohio Agricultural Research Station, Caldwell, 5:30pm-8:00pm
- 10/25 Eastern Ohio Grazing Council ([visit carrollswcd.org/eastern-ohio-grazing-council.html](http://visit.carrollswcd.org/eastern-ohio-grazing-council.html) for event details)

## EXTENSION’S MOST WANTED...

**FERAL SWINE.** Usually, the focus of these posts are on plants and insects. However, there are a few warm-blooded critters that can also make the “most wanted” list.



Craig Hicks, Bugwood.org

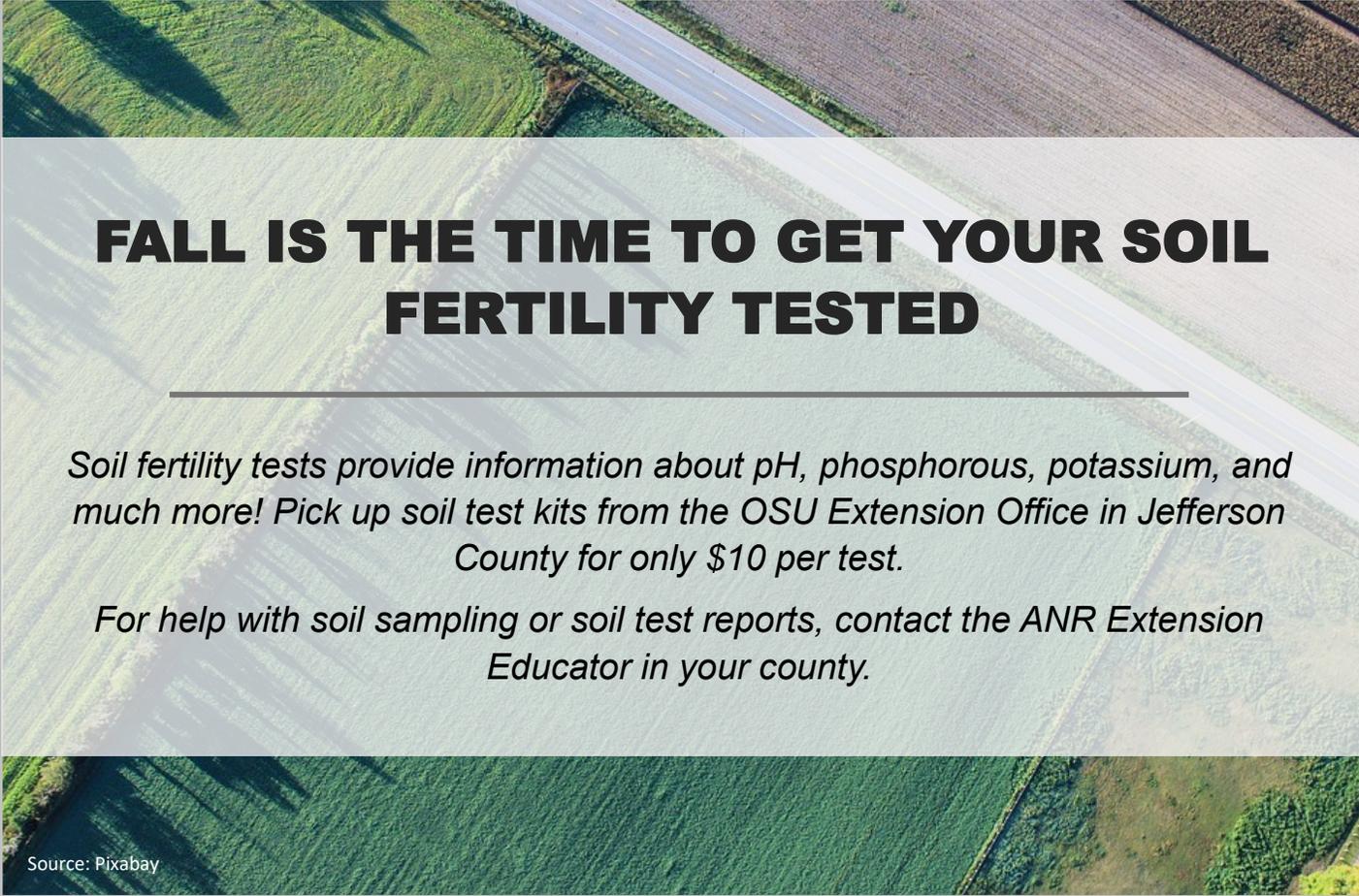
Feral swine are the same as domesticated pigs—that is, they are the same species, *Sus scrofa*. They go by many names, including wild boar and wild hog. Feral swine, like many invasive species, were brought in by European settlers, but in recent years, populations of feral swine have been expanding rapidly into areas where they are not known to have previously existed.

These animals can cause extensive damage to property, including crops and archeological sites. They are also known to carry many diseases and parasites, and many of these are transmittable to hogs raised as livestock and humans. To add to their notoriety, feral swine are also aggressive and can attack unprovoked.

Report any suspected feral swine to [wild-info@dnr.state.oh.us](mailto:wild-info@dnr.state.oh.us). Visit [ohiodnr.gov/feralswine](http://ohiodnr.gov/feralswine) for more information.



Sasa Kunovac, University of Sarajevo, Bugwood.org



# FALL IS THE TIME TO GET YOUR SOIL FERTILITY TESTED

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*Soil fertility tests provide information about pH, phosphorous, potassium, and much more! Pick up soil test kits from the OSU Extension Office in Jefferson County for only \$10 per test.*

*For help with soil sampling or soil test reports, contact the ANR Extension Educator in your county.*

Source: Pixabay

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

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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.

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