Hello Coshocton County! Looks like more winter-like weather is on its way. We knew this was coming even though our furry rodents said spring was on its way. Many will welcome the colder weather especially if it means freezing up some of the mud we have had.

Since the last edition of this newsletter, we co-sponsored 2 Farm Bill Meetings with the Farm Service Agency, offered the February Farmers Breakfast with FSA and SWCD and held our first Pesticide & Fertilizer Re-certification session.

A regional beef meeting was also held in Licking County on January 30 at which a lot of great information was shared on feeding cattle. This is especially important given the lower quality of hay which has been made the past two summers. Just a reminder that we can send hay samples out to be tested just like soil tests. Each test is $35 per test and gives you the protein, ADF, and NDF levels of your hay.

Three local farms had me come out to pull hay samples last week. If you would like me to make a farm visit and collect some hay samples, just let me know. There is great power in knowing the actual quality of the forages you are feeding. To help you learn more about hay and knowing its quality, we are offering a Hay Quality Workshop on March 3 in Clark. Check out the details about this workshop in this issue.

There are lots more programs on the horizon for this winter—I hope to see you at these events. Have a great week!

Sincerely,

David Marrison

Coshocton County OSU Extension ANR Educator
**Wetter Conditions Remain Favored for Spring**
By Jim Noel
Source: [https://agcrops.osu.edu/newsletter/corn-newsletter/2020-03/wetter-conditions-remain-favored-spring](https://agcrops.osu.edu/newsletter/corn-newsletter/2020-03/wetter-conditions-remain-favored-spring)

The outlook for February calls for near normal temperatures after the warm start with normal to above normal rainfall. That was the only change in the outlook. February looks wetter than a few weeks ago. Rainfall the next two weeks will average 1-4 inches across the state. Normal for two weeks is about 1.5 inches. You can see the consensus 16-day rainfall outlook at: [https://www.weather.gov/images/ohrfc/dynamic/NAEFS16.apcp.mean.total.png](https://www.weather.gov/images/ohrfc/dynamic/NAEFS16.apcp.mean.total.png)

The spring outlook is for a chilly start but a warmer than normal finish. Above normal rainfall is in the outlook until at least May. However, it does not look as wet as 2019 at this time. The trends in the climate models indicate a switch to hotter and drier weather as we go through summer. You can keep up-to-date on all the NOAA climate outlooks at: [https://www.cpc.ncep.noaa.gov/](https://www.cpc.ncep.noaa.gov/)

**Overwintering of Pathogens & Insects – What Do Winter Temperatures Tell Us About Next Season?**
By: Dr. Anne Dorrance, Dr Kelley Tilmom, & Dr. Andy Michel

Over the years we have developed databases of winter temperatures followed by scouting to indicate starting pathogen populations for Ohio.

**Frogeye leaf spot** – We have documented early infections and overwintering ability of the fungus, Cercospora sojina, that causes frogeye leaf spot. It appears that when there are less than 10 days during the months of December, January and February of less than 17 F, we have had reports of outbreaks of frogeye leaf spot. This occurred in fields where there was a high level of inoculum at the end of the season the same or similar moderately to highly susceptible cultivar was planted into the same field again which then initiated the epidemic that much sooner. Losses of greater than 35% in yield or very early fungicide applications were necessary.

Expecting continued warmer winter temperatures, for fields with a history of frogeye leaf spot, and no-till production systems, the first thing for farmers is to do now to mitigate losses in 2020:

1. Rotate fields with high levels of frogeye leaf spot into corn or another crop.
2. If it is still targeted for soybean, look at their soybean varieties frogeye leaf spot resistance scores. Your seed dealer will have more information. Plan now for what fields they will go into.
3. Scout the susceptible cultivars much earlier than what we have called for in the past and monitor levels.

Another pathogen that may be more prevalent after a warm winter is Stewart’s bacterial wilt. This disease is transmitted to corn by corn flea beetle which survives in greater numbers in warm winters. This is a greater problem in popcorn and sweet corn as most field corn has high levels of resistance to the bacterium.

Most other field crop insect pests in Ohio are not highly influenced by winter conditions as they are well-adapted to withstand cold overwintering conditions. Once exception is Mexican bean beetle, an occasional pest of soybean (especially in central Ohio). Warm winter conditions may cause higher populations of this insect the following field season.
**eFields Meeting on March 10**
eFIELDS is an OSU Extension program dedicated to advancing production agriculture using on-farm research. Coshocton County Extension is pleased to be hosting one of the regional eFields meetings on Tuesday, March 10 starting at 6:00 p.m. at the OSU Extension-Coshocton County office. The evening will include a review of local and statewide projects, discussion with farmer cooperators, and planning for 2020. There is no cost to attend but courtesy reservations are being requested. Contact the Coshocton County Extension office at 740-622-2265 or email Marrison.2@osu.edu to RSVP. Registration can also be made on-line at: go.osu.edu/eFieldsMeeting. The e-version of the 2019 eFields report can be viewed or downloaded at go.osu.edu/eFields.

**Hay Quality Workshop Slated for March 3**
It is no secret our weather conditions have made it difficult to make high quality hay in East Central Ohio during the past few years. The Coshocton & Holmes County Extension offices invited hay and livestock producers to a “Hay Quality Workshop” on Tuesday, March 3 from 6:00 to 8:00 p.m. at the Miley Community Center at 1332 State Route 83 in Clark, Ohio.

Dr. Ted Wiseman, OSU Extension Educator from Perry County will be the keynote speaker for this event. Participants will learn more about forage sampling, how to interpret a forage analysis, and how to account for poor quality hay when feeding livestock. Learn more about Crude Protein, ADF, and NDF. Learn why your cow’s belly may be full of hay but still lacking nutrients. Knowing the key numbers from a hay quality test will help you feed your livestock better!

The fee for this workshop is $5 per person to cover refreshments and facility rental. This fee can be paid at the door. Pre-registrations are being requested so that adequate handouts and refreshments can be made. Contact either the Coshocton County Extension office at 740-622-2265 or the Holmes County Extension office at 330-674-3015 to make your reservation.

**Are Your Grazing Animals in Balance with your Forages?**
By: Victor Shelton, NRCS State Agronomist/Grazing Specialist
Source: https://u.osu.edu/beef/2020/02/05/are-your-grazing-animals-in-balance-with-your-forages/#more-8218

Are the grazing livestock in balance with the forages present?
This time of year, especially after you have shifted from grazing to fed feed such as hay or balage, you might start wondering why you have the number of livestock that you have. Life is short, some animals just need to grow some wheels. I said it recently, but I’ll quote the late Gearld Fry again, “If you cull the ten percent you should be culling, the herd that’s left is just that much better.” It’s probably a good thing to question the number of grazing livestock you have, especially when you are feeding them stored and/or bought feed. I was at a meeting recently and was asked a familiar question about how many acres you need to have per cow. That is a question that can’t be answered quickly, at least not accurately.

What does the question on “acres per cow” have to do with winter feeding? It’s important if you care about cow cost and inputs. Winter feed costs usually make up the majority of annual maintenance expenses of keeping a cow. If you have enough forage available, you have potential to graze more days and the more grazing time
you have for the cows, or whatever grazing livestock you have, the less feed you will need. There are several variables to this “acres per cow” question. Let’s first look at the dry matter requirements of a cow for a year. To keep the math easy and to also mimic a common unit, let’s use a 1,000-pound cow or one animal unit (AU) which is one thousand pounds live weight. If that cow had weighed 1,200 pounds, she would be 1.2 AU’s.

How much will this 1,000-pound cow eat in a year? The factors that influence the amount a cow will eat include her weight, body condition, and stage of pregnancy or lactation. Quality and availability of forage can certainly influence intake. In most cases, the average maintenance intake is about 2.6% of the body weight up to about 3.5% at peak lactation or slightly higher if a first calf heifer. A safe average number to use is generally 3%. So, that 1,000-pound (1 AU) cow will consume on average thirty pounds of dry matter per day. That thirty pounds of dry matter needs to meet her nutritional needs. She generally won’t consume much more than that amount, so what she eats must meet her needs or she will lose weight. Her average yearly dry matter intake will then be 10,950 pounds.

Let’s pause and think about this for a moment. To feed this one, 1,000-pound cow for a year, without any waste considered or harvest efficiency figured, she’s going to need to consume 5.5 tons of dry matter from pasture or fed feed. Let’s first look at what this would look like as dry hay. That 5.5 tons in 1,500-pound round bales (not corrected for moisture) is equivalent to approximately 7.3 round bales or about 180 small square bales.

When you harvest hay off a field, the average harvest efficiency is about 70%. The remaining is stubble left after mowing and lost, missed, or dropped leaves. At 70% harvest efficiency, the amount of gross dry matter produced to make the 10,950 pounds of dry matter harvested is actually 15,643 pounds.

If you kept the cow in a pen and carried everything to her, then we have to also consider feeding efficiency and possibly storage loss. Sadly, hay stored outside, on the ground, and fed directly, can have high wastage. We can have similar wastage when they are grazing. Some of the wastage easily seen comes from forage that is tainted by an animal’s manure, urine, or to a degree, perhaps smelly feet of another cow.

Let’s now look at it from the other side of the fence. How many acres would it take to produce eight tons of total forage? There are always exceptions, but a high average probably wouldn’t make four tons per acre. If it did, that means it will take two acres of forage with a harvest efficiency of 70% (equivalent to daily moves) to meet the dry matter needs of that one 1,000-pound cow for a year. If the average yield is only three tons per acre, then 2.6 acres of forage would be required. Certainly, some highly managed hay fields can exceed the four-ton yield, but those are not average.

So far, we’ve looked at this purely as if it is a closed system. In other words, you are not bringing any dry matter onto the farm, you are basing it only off what is produced there. Just so we’re on the same page, you are also assuming that this dry matter is either forage grazed or harvested and fed on the farm. If you allow overgrazing of the forage where those stop grazing heights are not maintained, you will not maintain a sufficient solar panel or plant energy reserve, and this will mean a loss in potential production. The same thing happens if you delay grazing too long; quality is reduced and so is some regrowth potential. How the forage is managed (i.e. residual or stop grazing heights maintained, rest allowed for regrowth and refreshing energy reserves, start grazing heights), and how it is allocated highly influences the grazing efficiency of the system. You can quickly go from 70% efficiency to thirty-something as management or sometimes conditions decrease.

I often question grazing efficiencies and find myself testing them. It’s not an easy task. Even if you take away all grazing factors such as caging an area for a season so you can take a clipping off that caged area to figure season long production, it can still be off some due to loss of potential regrowth between timely grazing events. If forages can be maintained more, in what I often call stage two, where the solar panel is the most active due to the highest leaf area being available and before flowering, then we can potentially increase production because we are able to collect more solar energy for a longer period of time and take advantage of more
tillering and regrowth, as long as fertility and moisture are not limited.

On average, continuous grazing often has a grazing efficiency of about 30% to 50% due to suppressed growth and regrowth, avoided areas that can come from underutilized areas and undesirable species, and stocking rate. Under high management, frequent moves and appropriate allocations, you can often be equivalent to hay harvest efficiency or slightly higher. A good system at top efficiency and average production of three tons per acre to meet the dry matter requirements of the 1,000-pound cow for a year is going to require 2.6 acres. If you are continuously grazing, you will need more acres. What? That sounds crazy, but lost production is normally replaced with supplemental hay or feed outside the system and you don’t realize how out of balance things really are. Sometimes letting a few animals go, especially when quite a bit of supplemental hay or feed is needed to sustain those numbers, ends up being better on the bottom line. Keep on grazing!

**When to Start Grazing: Don’t Rush It**
By: Chris Penrose, Extension Educator, Ag and Natural Resources, Morgan County (originally published in the Ohio Farmer online)
Source: [https://u.osu.edu/beef/2020/02/05/when-to-start-grazing-dont-rush-it-2/](https://u.osu.edu/beef/2020/02/05/when-to-start-grazing-dont-rush-it-2/)

One goal I have had with livestock grazing over the years is to start as soon as I can. I put spring calving cows on stockpiled grass in early March to calve with the hope of not having to feed any more hay. Many years this works and some years it does not. The best I have been able to do over the years is to do a rapid grazing of paddocks that are starting to grow that were not grazed close last fall or during the winter. I would then hope that by the time I went through the paddocks, the spring flush of growth was well underway. If the winter continues into spring like the way it began, I suggest we don’t rush things as we have a couple issues that could be going on. First, growth may be slow this spring, and second, many pastures have sustained abnormal damage this winter from the wet conditions.

As mentioned, if you have fields that were not grazed in the late fall or over the winter and are in good shape, you may be able to do a fast rotation through them when growth allows it. However, if fields are not in good shape and growth is just starting, waiting is a better option. Grass starts growing from the roots and needs enough leaf surface to start putting energy back into the roots and if it is grazed off before this can happen, it will weaken or kill the plant.

In addition, if the field does not get enough time to recover and grow desirable grass and legumes, summer annual weeds are likely to germinate and grow in the next couple months. How many of us had weeds like foxtail, horsenettle, cocklebur, and ragweed in our fields last year? A likely contributor could be the fields were grazed too close and too soon in the spring. I have had success reducing weed issues – ragweed in particular – by skipping the first rotation or two in fields that had notable damage from feeding hay over the winter. If you do plan on doing early grazing when growth starts with the hope that by the time that is done the spring “flush of growth” will have started, don’t keep them in paddocks too long. The fast rotation will reduce the chances that the cows will graze too close, and if the ground is wet, pugging will be minimized. Also skip paddocks at least once where you fed hay this winter to allow them to recover and reduce the amount of summer weeds you will have.

If you have damage to paddocks, there are a several options: do nothing, frost seed, or smooth up and re-seed. If damage is not too bad, you can simply do nothing. Production may be limited for the year and you may need to monitor weed issues. If damage is not too bad and some re-seeding may be appropriate, frost seeding may still be an option.

If you need to smooth up ground and re-seed, determine if you want to plant annual or perennial plants, I
generally lean towards perennials. Many situations, a mix of grass and legumes works well. If it is in a field that will have abuse in future years, a persistent grass like endophyte fescue or a novel endophyte fescue will provide a denser more persistent sod.

The bottom line is the less we have to feed hay in fields, the less damage we will potentially have. In the perfect world, we would be able to stockpile enough forage and even plant some crops like turnips, oats and cereal rye to meet most of the feed requirements for the winter. When we have to feed hay, a heavy use pad is an excellent option.

So much of this is an art based on science. I remember my teacher and friend Lorin Sanford say “It is the eye of the master that fattens the cow”. There are a lot of variables in each producer’s operation. Everyone’s situation is a little different, but resist the temptation if hay is running short to put cattle out on fields that are just starting to grow that have been under any stress from close grazing or winter damage. It will allow for less hay fed in the long run and a more productive field this summer. If areas need to be re-seeded from damage, they will also need additional time to recover and grow as well. Finally, now is a good time to evaluate ways to reduce the need for stored feed next winter.

**Farm Financial Management Workshop Slated for February 27**

OSU Extension and Farm Credit Mid-America has developed a workshop which will encourage farm managers to take a critical look at their financial management skills. OSU Extension and Farm Credit invite you to attend our **Farm Financial Management** workshop scheduled for Thursday, February 27 from 9:30 to 3:00 p.m. at the Coshocton County Extension office.

The goal of this workshop is to help farm managers build their financial management skills. Learn how to develop better balance sheets, farm income & cash flow statements, and enterprise budgets. Learn more how farm financial ratios can help you better manage your farm finances. Additional discussions will be held on benchmarking, record keeping and managing family living expenses. Our goal is to help farm managers move from just paying bills to being a chief financial officer.

The registration fee for this workshop is $10 per person and includes refreshments, lunch and program handouts. Room space is limited so we are asking that pre-registrations be made by Thursday, February 20, 2020. For more information, call the Coshocton County Extension office at 740-622-2265. A registration flyer can also be found on our website at coshocton.osu.edu.

**Sharpen Your Farm Management Skills at Lunch Webinars**

OSU Extension in Coshocton County invites farm managers to grab their lunch and join us for one of the following State Farm Management webinars. These webinars will be held on:

- **February 19: Grain Contracts & Markets: What to Use When (11:45 a.m. to 1:15 p.m.)**
  - Featured Speaker: Lindsay Fager, Risk Management Trainee with INTL FCStone Bowling Green, Ohio.
  - Learning Objectives: • Understanding the types of grain contracts, how they compare amongst each other, and using them to manage risk. • Understand grain price cycles and when is the right time to market grain. • Learn about the factors that influence the grain markets.

- **February 26: Where to Start with Workers Compensation Benefits (11:45 a.m. to 1:15 p.m.)**
  - Featured Speaker: Dee Jepsen, Leader of the OSU Extension Ag Safety and Health Program and the Ohio AgrAbility program.
  - Learning Objectives: • Learn what is required and not required by Ohio Workers Compensation Benefits • Learn strategies to improve worker safety on the farm. • Understand reporting and documentation requirements under the law.

- **March 11: Estate Planning: What are the Tools and Options (11:45 a.m. to 1:15 p.m.)**
  - Featured Speaker: Robert Moore, Co-owner of Wright & Moore Law Co. LPA
  - Identify and explain legal tools available to farmers for a succession plan • Discuss succession planning strategies • Address specific questions from participants.
March 18: Grain Marketing Strategies for 2020 (11:45 a.m. to 1:15 p.m.)
- Featured Speaker: Ben Brown, Assistant Professor of Professional Practice in Agricultural Risk Management at the Ohio State University.
- Learn strategies for pre- and post-harvest marketing plans • Learn how to use market basis to improve profitability • Understand how to manage spreads in long/short basis environments • Understand how to connect crop insurance to your marketing plan.

There is no fee to attend. But due to the size of the meeting room, each webinar will be limited to 11 people. Call the Coshocton County Extension office today to reserve your spot at 740-622-2265. Email David Marrison at marrison.2@osu.edu for additional details.

Backyard Fruit Production Workshop
OSU Extension invites Coshocton County residents to attend a Backyard Fruit Production Workshop on Monday, March 23 from 6:00 to 8:00 p.m. at the Coshocton County Services Building located at 724 South 7th Street in Coshocton, Ohio.

This workshop will help participants learn how to grow strawberries, red raspberries, black raspberries, and blackberries. Participants will also learn how to care for fruit trees such as apple, peach and pear trees. The keynote speaker Sabrina Schirtzinger, OSU Extension Educator in Knox County.

The registration fee of $10 includes the program, light refreshments, door prizes, and handouts. Due to space limitations, this program will be limited to the first 30 registrants. First come, first served basis. Don’t miss this chance to learn more about growing delicious fruit for your family. For more information about this program, contact the Coshocton County Extension office at 740-622-2265.

OSU Extension to Host 7th Annual East Ohio Women in Ag Conference
Ohio State University (OSU) Extension, the outreach arm of the College of Food, Agricultural and Environmental Sciences (CFAES) will host the 7th Annual East Ohio Women in Agriculture Conference. This year’s conference convenes on Thursday, March 19 from 9:00 a.m. – 3:30 p.m. at the RG Drage Career Technical Center, 2800 Richville Drive SE in Massillon. All women and young women (high school age) who are interested, involved in, or want to become involved with food, agricultural, or natural resources production or small business are encouraged and welcomed to attend.

The conference program features an agency/vendor fair and eighteen educational breakout sessions presented by OSU Extension educators, producers and partner agencies. Sessions focus around five themes: Business & Finance, Plants & Animals, Communication, Home & Family and Special Interest (areas of specific interest to attendees). Farm and Dairy Editor, Rebecca Miller is the conference featured keynote speaker. Her presentation will engage and enlighten participants on “Clinging to context in a noisy world: don’t lose sight of your “why”.

Interested individuals can register for the conference on-line at go.osu.edu/eowia2020. Cost of the conference is $55 for adult participants and $30 for students. Conference fee includes conference participation, continental breakfast, lunch and conference handouts. Deadline for registration is Thursday, March 12.
Hello, Northeast Ohio! The tragic death of Kobe Bryant, his daughter Gianna and seven others in a helicopter crash in Calabasas, California on January 26 sent shock waves of emotion across the globe. I know this accident caused many to take pause, hold their loved ones closer, and to reflect on their own mortality.

Death is a topic that many of us are not comfortable talking about. It is even harder to think about our own mortality. From my experience, death has the potential to bring a family closer or rip it apart. As tragic as Kobe Bryant’s death was, I hope it was a trigger for your family to talk and think about how your family and your farm will operate once you are gone.

Has your family discussed the future of your farm business? One of the hypothetical questions I pose in our OSU Farm Succession workshops is “What knowledge would you need to pass on if you knew you had only 2 months to live?” This exact scenario happened to our family ten years ago when my father was diagnosed with pancreatic cancer. My dad fought a courageous battle for seven weeks before passing away.

I am grateful that we had the seven weeks with my dad to make preparations. Kobe Bryant’s helicopter crash reminds us that your world can change in an instant. I challenge you to think how your farm and family would react to the loss of the principle operator. What knowledge and skills need to be transferred to the next generation so they can be successful without you?

During our farm succession workshops we challenge farm families to develop a long term plan for their farm. As you plan there are a myriad of decisions to be made. One of the most difficult is determining how to be fair to off-farm heirs without jeopardizing the future of the heirs who have remained with the family business. Other decisions include deciding who will manage the business in the future, how to distribute assets, how and when the senior generation will retire, and how the business will deal with unexpected issues such as divorce, disability or paying for nursing home expenses.

One of the most crucial planning functions is preparing the next generation to lead the farm in the future. It is a great idea to ask the next generation what additional responsibilities they believe they should be taking on and what changes they would like to see made for them to be successful in the future. What do they need to be schooled up on? Have you completed a skills assessment with each son or daughter to see what training they need to be successful in the future? If they had to take over the farm today, what would they be most concerned or scared about?

So how do you know if the next generation is ready? There are two other approaches I offer as ways you can use to help prepare the next generation to lead without you.

**Opossum Approach** - Just as an opossum plays dead, so too should the principle operator. Take an unannounced week away from the farm during one of the busiest times of the year for your farm and allow the junior generation to take over with no communication from the senior generation. I know this sounds crazy but how else will you know what knowledge and skills need to be transferred? It is a lot easier to come back after a short vacation and be able to answer the questions your son or daughter has. You won’t have this opportunity when you pass away.

**365 Day Challenge** - Outside of using the opossum approach, it should be the goal of the senior generation to transfer at least one knowledge point or skill to the next generation each day. In 2020, you get one extra day. So by the end of the year, your heirs will have 366 new tools in their management tool box. If you do this over the next five to ten years, you can teach your heirs an incredible amount.

Our farm succession team is here to help you. In addition to our one day or two day workshops, we are also available to speak at other events and to conduct kitchen-table meetings with your farm family. Details on our
farm succession workshops can be found at ohioagmanager.osu.edu.

To close today’s column, I would like to share a quote Chuck Palahniuk who stated, “We all die. The goal isn't to live forever, the goal is to create something that will.” Have a good and safe day!

A Super Time to Scout for Bagworm
by: Thomas deHaas, Extension Educator
Source: https://bygl.osu.edu/index.php/node/1439

Ever drive by a tree and say to yourself, something doesn’t look right. Many Blue Spruce, Picea pungens ‘Glauca’, are showing infestations of bagworm. Bagworms tend to blend in with other parts of the tree.

At first, it may look like a spruce or fir cone. It can also look like Cooley Spruce Gall Adelgid. However, on close inspection, multiple bags may begin to appear, holding many eggs that will hatch in the spring and infest the tree the following spring.

On conifers, especially junipers, arborvitae and spruces, the larvae can defoliate branches and even entire trees. The bags are surprisingly difficult to see when they are covered with fresh, green plant material. When this turns brown, homeowners often think that they are seeing cones of some sort. (Bagworm on the right, Douglas Fir cone on Left below)

Bagworms overwinter as eggs. These eggs remain in the body of the mummified female and seem to be surrounded by some insulation-like material. Fairly late in the spring, late May into early June, the eggs hatch and the tiny larvae emerge through a hole in the bottom of the bag. Each larva spins down on a strand of silk and attempts to balloon. Most of the larvae are unsuccessful and simply land on the plant on which their bag was attached. As soon as the larva lands on a suitable plant, it begins to feed and it makes a tiny cone-shaped silk bag.

The second instar larvae continue to enlarge their bags and continue sticking their frass pellets to the silk. After a week or two, the third instar larvae greatly enlarge their bags and begin to include bits and pieces of their plant’s foliage. The bags are also big enough at this time for the larvae to withdraw inside and hold the bag opening closed with their front legs. Since the bags are covered with fresh plant leaves, the bags are easily missed. The larvae continue feeding and enlarging their bags for about six to eight weeks.

It is always wise to remove bagworm bags when possible because the attachment silk loop can eventually girdle small branches of trees and shrubs. Bagworms are most easily controlled by removing bags in the fall and destroying them. In heavy populations, insecticides applied in mid- to late June are the most effective.

A great You-Tube video was produced by Dr. Dave Shetlar: https://www.youtube.com/watch?v=YZUOS6xiJjc
Colorado Blue Spruce in Ohio seem to be encountering more issues in the landscape. Whether the trees are suffering from stress or insect and/or disease pressure, they seem to be losing the battle more than winning. Bagworm can become a large problem and defoliate/weaken the tree.

In addition, Cooly Spruce Gall Adelgid can cause some damage. Diseases like Rhizosphaera needle cast and Cytospora canker can also invade a weakened tree. Bagworms can be found on deciduous and evergreens, although damage on evergreens can be more lethal since they defoliate the tree and they will not grow needles until the next year. Several years of defoliation can kill the tree.
Other evergreen showing symptoms of bagworms were Arborvitae, Thuja occidentalis, Blue Nootka False Cypress, Chamaecyparis nootkatensis ‘Glauca’, and Douglas Fir, Pseudotsuga menziesii.

Now is a great time to get out and scout for bagworm. As mentioned, if only a couple of bags are observed, just remove them and burn them, unless the tree is too tall. The best way to remove the bags is to cut them off with pruning shears. Pulling the bags off by hand can damage the cambium tissue on the stem since the silk from the bagworm is very strong. Otherwise, contact insecticides will kill larvae during feeding, but systemic insecticides will be ingested at time of feeding and provide good control. Always consult the pesticide label and Happy Scouting!

**2020 Ohio Vegetable Trials**

By: Carri Jagger, Extension Educator  
Source: [https://bygl.osu.edu/node/1441](https://bygl.osu.edu/node/1441)

The Ohio State University is conducting vegetable trials with home gardeners. We want your opinion as to what grows well in Ohio and what Ohioans prefer (including the taste). There will be two sets of trials this year; spring trials and summer trials. Each will have five vegetables to choose from. You may choose how many of these that you would like to try in your garden. For each vegetable there will be two varieties to test side-by-side. Each vegetable trial will cost $3 and will include enough seed to grow a 10 foot row of each variety, growing instructions with garden layout options, and row markers. You are asked to report your results either on the provided paper form or by using our online system. Additionally, we are asking you to submit photos for us to share with others in the project as we go through the season. Ed Brown Agriculture and Natural Resources Extension Educator from Athens County is the lead on this project. To sign up for these trials access: [Go.osu.edu/veggies2020](http://Go.osu.edu/veggies2020)

**Spotted Lanternfly Slowly Approaching Ohio**

By: Jim Jasinski, OSU Extension  
Source: [https://u.osu.edu/vegnetnews/2020/02/05/spotted-lanternfly-slowly-approaching-ohio-j-jasinski-c-welty/](https://u.osu.edu/vegnetnews/2020/02/05/spotted-lanternfly-slowly-approaching-ohio-j-jasinski-c-welty/)

The Spotted Lanternfly (SLF) is a newly discovered invasive pest from Asia. It is primarily a pest of trees like apples, cherries, black walnut, poplar, maple, tree of heaven and vines such as grapes and hops but it’s not reported to attack most vegetable crops. This pest was first detected in Berks County, PA in 2014, and has since spread to NJ, DE and VA; it has also been observed in MD, NY, CT and NC. In January 2020, new detections were found in western PA bordering Ohio and in eastern West Virginia (Figure 1).

Damage is caused by inserting large sucking mouthparts into the trunk of the tree or vine and then siphoning out large amounts of sap. Excess sap from either the trunk injury or the planthopper can drip down the trunk and turn dark if infected with sooty mold. No diseases are known to be spread by this insect at this time, but excessive feeding weakens the tree and causes increased mortality during winter.

This pest is a planthopper and as an adult has red and purple wings and nearly one inch long (Figure 2). The immatures resemble stink bugs, being black with white spots when young, and red with black and white spots when mature.
when older. The overwintering stage is the egg which is laid in masses of 15-30. At this time of the year, the eggs look like elongated brown seeds which can be attached to just about any surface including wood, stone and metal.

While we have NOT seen this pest in Ohio yet, it is within 15 miles of our eastern border and could very likely hitchhike its way into Ohio on a car, truck, trailer, train or boat. If you have tree of heaven on your property, which is one of its favorite hosts, or a vineyard nearby, check the trunks or vines for eggs now or check for nymphs and adults later in the season. If any questionable insects are seen, mark the location, take pictures, and contact your local Ohio State University Extension office or the Ohio Department of Agriculture, Division of Plant Health at 614-728-6400. Do not collect or transport any suspected SLF eggs, nymphs or adults.

For more information and pictures, see USDA’s Pest Alert on this pest: https://www.aphis.usda.gov/publications/plant_health/alert-spotted-lanternfly.pdf

**Upcoming Program Dates**

- Farm Succession Workshop - February 12 & 19
- Farm Management Luncheon Webinar Series - Feb 19 & 26 and March 11 & 18
- Hay Quality Workshop: March 3
- Pesticide & Fertilizer Re-certification in Coshocton - March 4
- Farmers Breakfast - March 10
- eFields Regional Meeting in Coshocton - March 10
- Mortality Composting Workshop - March 18
- Pesticide & Fertilizer Re-certification in Tuscarawas County - March 19
- Backyard Fruit Production Workshop: March 23
- National Ag Day Luncheon - March 25
- Pesticide & Fertilizer Re-certification in Tuscarawas County - March 26

Check out upcoming programs at:

[go.osu.edu/coshoctonevents](go.osu.edu/coshoctonevents)
It is no secret our weather conditions have made it difficult to make high quality hay in East Central Ohio during the past few years. The Coshocton & Holmes County Extension offices invited hay and livestock producers to a “Hay Quality Workshop” on Tuesday, March 3 from 6:00 to 8:00 p.m. at the Miley Community Center at 1332 State Route 83 in Clark, Ohio. Dr. Ted Wiseman, OSU Extension Educator from Perry County will be the keynote speaker for this event. Participants will learn more about forage sampling, how to interpret a forage analysis, and how to account for poor quality hay when feeding livestock. Learn more about Crude Protein, ADF, and NDF. Learn why your cow’s belly may be full of hay but still lacking nutrients. Knowing the key numbers from a hay quality test will help you feed your livestock better!

The fee for this workshop is $5 per person to cover refreshments and facility rental. This fee can be paid at the door.

Pre-registrations are being requested so that adequate handouts and refreshments can be made. Contact either the Coshocton County Extension office at 740-622-2265 or the Holmes County Extension office at 330-674-3015 to make your reservation.
As rendering and burial options for livestock mortality become more limiting or restrictive, composting livestock mortality is a good and environmentally friendly alternative. To legally compost livestock mortality in Ohio, producers are required to attend a certification training. OSU Extension invites livestock producers to earn their **Mortality Composting Certification** on March 18, 2020 from 6:30 to 8:30 p.m. at the Coshocton County Extension office. Rory Lewandowski, Wayne County Extension will be the featured speaker for this program. Upon completion of the program, all participants will be certified in livestock mortality composting. The fee for this certification is $10 per person (but waived for Coshocton County residents).

**PRE-REGISTRATION IS REQUESTED.** There is no registration fee for Coshocton County residents and $10 for out-of-county attendees. Room space is limited so register today! Call 740-622-2265 or email marrison.2@osu.edu for more information or to reserve your spot.

Name___________________________________ County__________________
Address___________________________________________________________
Email_________________________________ Phone_____________________

_____ $0 for Coshocton County Residents  _____ $10 for Out-of-County

Make checks payable to **OSU Extension** and return to: OSU Extension, 724 South 7th Street, Room 110, Coshocton, Ohio 43812

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information: go.osu.edu/cfaesdiversity
Sharpen Your Farm Management Skills at Lunch Webinars

Coshocton County Services
Bldg - Room 110
724 South 7th Street
Coshocton, Ohio 43812

OSU Extension in Coshocton County invites farm managers to grab their lunch and join us for one of the following State Farm Management webinars.

February 19: Grain Contracts & Markets: What to Use When (11:45 a.m. - 1:15 p.m.)
Lindsay Fager, Risk Management Trainee with INTL FCStone Bowling Green, Ohio.
Understand the types of grain contracts, how they compare amongst each other, and using them to manage risk. • Understand grain price cycles and when is the right time to market grain. • Learn about the factors that influence the grain markets.

February 26: Where to Start with Workers Compensation Benefits (11:45 a.m. - 1:15 p.m.)
Dee Jepsen, Leader of the OSU Extension Ag Safety and Health Program and the Ohio AgrAbility program.
Learn what is required and not required by Ohio Workers Compensation Benefits • Learn strategies to improve worker safety on the farm. • Understand reporting and documentation requirements under the law.

March 11: Estate Planning: What are the Tools and Options (11:45 a.m. to 1:15 p.m.)
Robert Moore, Co-owner of Wright & Moore Law Co. LPA
Identify and explain legal tools available to farmers for a succession plan • Discuss succession planning strategies • Address specific questions from participants.

March 18: Grain Marketing Strategies for 2020 (11:45 a.m. to 1:15 p.m.)
Ben Brown, Assistant Professor of Professional Practice in Agricultural Risk Management at the Ohio State University.
Learn strategies for pre- and post-harvest marketing plans • Learn how to use market basis to improve profitability • Understand how to manage spreads in long/short basis environments • Understand how to connect crop insurance to your marketing plan.

There is no fee to attend. But due to the size of the meeting room, each webinar will be limited to 11 people. Call the Coshocton County Extension office today to reserve your spot at 740-622-2265.
eFields is an Ohio State University program dedicated to advancing production agriculture through the use of field-scale research.

Make plans to join us to learn about the 2019 study results from your area plus across the state.

AGENDA

6:00 PM eFields Overview
6:30 PM Local Trials and Results
7:45 PM Partner Farmer Panel
8:30 PM Discuss Future Projects

March 10, 2020: 6 – 9 p.m.
Location: Coshocton County Services Building – Room B100
724 South 7th Street
Coshocton, Ohio 43812

No cost to attend.
RSVP at go.osu.edu/eFieldsMeeting

Contact: David Marrison
Marrison.2@osu.edu
740-622-2265

For More Information:
go.osu.edu/eFields
OSU Extension and Farm Credit Mid-America invite farm managers to attend a Farm Financial Management workshop on Thursday, February 27 at the Coshocton County Extension office. The goal of this workshop is to help farm managers build their financial management skills. Learn how to develop better balance sheets, farm income & cash flow statements, and enterprise budgets. Learn more how farm financial ratios can help you better manage your farm finances. Additional discussions will be held on benchmarking, record keeping and managing family living expenses. Move yourself from bookkeeper to chief financial officer. Thank you to Farm Credit for their sponsorship of this program.

PRE-REGISTRATION IS REQUESTED. The registration fee is $10 per person and includes refreshments, lunch and program handouts. Room space is limited. Please register by February 20, 2020. Call 740-622-2265 or email marrison.2@osu.edu for more information or to reserve your spot.

Name___________________________________ County__________________
Address__________________________________________________
Email_______________________________ Phone___________________
I grow/raise: _____Corn ____Soybeans      _____Wheat     ____Forage/Hay
    ____Dairy ____Cow/Calf       _____Swine      ____Poultry    _____Other
Make checks payable to OSU Extension and return to:
OSU Extension, 724 South 7th Street, Room 110, Coshocton, Ohio 43812
Backyard Fruit Production Workshop

Monday, March 23, 2020
6:00 to 8:00 p.m.

Coshocton County Services Bldg
Room B100
724 South 7th Street
Coshocton, Ohio 43812

Join OSU Extension and learn how to grow strawberries, red raspberries, black raspberries, and blackberries. Keynote speaker Sabrina Schirtzinger, OSU Extension Educator in Knox County, will also discuss caring for fruit trees such as apple, peach and pear trees.

Don’t miss this chance to learn more about growing delicious fruit for your family. Pre-registration is requested as space is limited to the first 30 registrants. The registration fee for this program is $10 per person.

REGISTRATION INFORMATION. The registration fee of $10 includes the program, light refreshments, door prizes, and handouts. Due to space limitations, this program will be limited to the first 30 registrants. First come, first served basis.

Name(s)____________________________________________________________
Address_____________________________________________________________
Email__________________________ Phone___________________

Total Enclosed $__________________  $10 per person to register

Please make checks payable to OSU Extension and mail to OSU Extension, 724 South 7th Street, Room 110, Coshocton, Ohio 43812. For more information, call 740-622-2265.
East Ohio
Women in
Agriculture
Conference

Who should attend:
Women and Young Women (high school age) who are interested, involved, or want to become involved in food, agriculture, natural resources, or small business.

This one-day conference is a great place to learn, share and network. Be surrounded by other women who are facing the same day-to-day ups, downs, adventures and dilemmas as you.

AGENDA
9:00  Registration, Network Fair & Breakfast
9:30  Welcome
10:00 Breakout 1
11:00 Breakout 2
12:00 Buffet Lunch
12:45  Key Note
      Clinging to context in a noisy world: don’t lose sight of your “why”
      Rebecca Miller
      Editor, Farm and Dairy
1:45  Breakout 3
2:45  Breakout 4
3:30  Closing and Door Prizes

Thursday
March 19, 2020
9 A.M. – 3:30 P.M.

R. G. Drage Career Technical Center
2800 Richville Drive SE
Massillon, OH 44646

$55 Adults/ $30 Students

Registration Deadline: March 12

For more information call 614-292-2433

Register online with credit card at go.osu.edu/eowia2020
or complete & send this registration form.

Cancellation Policy: If the R. G. Drage School is closed for any reason on March 19, 2020, this Conference will also be cancelled. The event will not be rescheduled. No registration fees will be refunded. All will be held as registration for the 2021 East Ohio Women in Agriculture Conference.
### Break Out Tracks & Sessions

<table>
<thead>
<tr>
<th>Business &amp; Finance</th>
<th>Plants &amp; Animals</th>
<th>Communication</th>
<th>Home &amp; Family</th>
<th>Special Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-A Insurance - Get Covered! – Kim Davis, Kim Davis Insurance Agency, LLC Just because you pay an insurance premium doesn’t mean you’re covered for everything! Don’t miss this fun, interactive session discussing all types of insurance.</td>
<td>1-B Raising Livestock on 5 Acres or Less – Sandy Smith, OSU Extension So you have some land and you want some extra income or a supply of food for your family. This session will investigate all of your options and possibilities.</td>
<td>1-C QPR (Question, Persuade, Refer) Suicide Prevention Training – Judy Wortham Wood, Wayne-Holmes Mental Health and Recovery Board QPR – Question, Persuade, Refer, a Suicide Prevention training, includes how to “ask a question to save a life,” recognizing warning signs, and referring for help.</td>
<td>1-D Fast Foods – Five Ingredients or Less! – Kate Shumaker, OSU Extension Cooking doesn’t have to be complicated! See (and taste) how a few ingredients can bring BIG flavor. Recipes will be provided.</td>
<td>1-E Reaching Your Educational Goals – Dennis DeCamp, OSU Extension Regardless of age, educational opportunities are always available. Explore options for obtaining and funding education to meet your goals while maintaining a balanced life.</td>
</tr>
<tr>
<td><strong>Session 1</strong></td>
<td><strong>Session 2</strong></td>
<td><strong>Session 3</strong></td>
<td><strong>Session 4</strong></td>
<td><strong>Session 5</strong></td>
</tr>
<tr>
<td>2-A Managing Price and Production Risk – Ben Brown, Ohio State University Ag is Risky!!! Explore a framework to evaluate the options available to producers. Leave with four tips on how to be a better grain marketer.</td>
<td>2-B Veterinarians: Building a Relationship &amp; Knowing When to Call – Dr. Em Mowrer, Stonehouse Veterinary A working relationship with your veterinarian can teach you when it’s appropriate to try something at home vs. having them out on a call to improve your farm’s husbandry &amp; production.</td>
<td>3-A LOL – Lots of Loans! – Panel Hear from our panel to gain insight from standpoint. 3-B Sustainable Stewardship for the Small Farm – Heather Neikirk, OSU Extension What is sustainable for you? Dig in and explore sustainability and stewardship practices and opportunities for utilization in small farm animal and plant-based enterprises.</td>
<td>3-B The Mystery of Fruit Tree Pruning – Paul Snyder, OARDC Secret Arboretum This session covers the basics of how and when to prune fruit trees, highlighting the most common backyard fruit tree, the apple tree.</td>
<td>3-C Sharing Your Story in a Handheld World – Bethany Pozderac &amp; Bethany Starlin, State FFA Officers Effectively communicating your story is important in today’s society. This session will primarily focus on utilizing social media.</td>
</tr>
<tr>
<td>2-B Sustainable Stewardship for the Small Farm – Ben Brown, OSU Extension</td>
<td>2-B Sustainable Stewardship for the Small Farm – Heather Neikirk, OSU Extension</td>
<td>3-C Sharing Your Story in a Handheld World – Bethany Pozderac &amp; Bethany Starlin, State FFA Officers</td>
<td>4-C He Said, She Said: – Emily Morrison, OSU Extension Women in agriculture often work with men in agriculture. Explore ways to improve interpersonal communication for more productive work settings and peaceful home environments.</td>
<td>3-D Cooking with Cast Iron – Christine Kendle, OSU Extension Are you not sure what pan to use? How to season it? How you should care for your cast iron cookware? This class is for you!</td>
</tr>
<tr>
<td>2-B Sustainable Stewardship for the Small Farm – Heather Neikirk, OSU Extension</td>
<td>3-C Sharing Your Story in a Handheld World – Bethany Pozderac &amp; Bethany Starlin, State FFA Officers</td>
<td><strong>Session 4</strong></td>
<td>4-D The Salt Shake Down – Bridget Britton, OSU Extension Want to learn how much sodium we consume at restaurants, and ways to decrease it? Hands-on menu reading and making substitutions for lower sodium options.</td>
<td><strong>Session 6</strong></td>
</tr>
<tr>
<td>3-A LOL – Lots of Loans! – Panel</td>
<td>3-C Sharing Your Story in a Handheld World – Bethany Pozderac &amp; Bethany Starlin, State FFA Officers</td>
<td>4-C He Said, She Said: – Emily Morrison, OSU Extension</td>
<td>4-D The Salt Shake Down – Bridget Britton, OSU Extension Want to learn how much sodium we consume at restaurants, and ways to decrease it? Hands-on menu reading and making substitutions for lower sodium options.</td>
<td><strong>Session 7</strong></td>
</tr>
<tr>
<td>3-A LOL – Lots of Loans! – Panel</td>
<td>3-C Sharing Your Story in a Handheld World – Bethany Pozderac &amp; Bethany Starlin, State FFA Officers</td>
<td>4-C He Said, She Said: – Emily Morrison, OSU Extension</td>
<td>4-D The Salt Shake Down – Bridget Britton, OSU Extension Want to learn how much sodium we consume at restaurants, and ways to decrease it? Hands-on menu reading and making substitutions for lower sodium options.</td>
<td><strong>Session 8</strong></td>
</tr>
<tr>
<td>3-A LOL – Lots of Loans! – Panel</td>
<td>3-C Sharing Your Story in a Handheld World – Bethany Pozderac &amp; Bethany Starlin, State FFA Officers</td>
<td>4-D The Salt Shake Down – Bridget Britton, OSU Extension Want to learn how much sodium we consume at restaurants, and ways to decrease it? Hands-on menu reading and making substitutions for lower sodium options.</td>
<td><strong>Session 9</strong></td>
<td><strong>Session 10</strong></td>
</tr>
<tr>
<td><strong>Session 3</strong></td>
<td><strong>Session 4</strong></td>
<td><strong>Session 5</strong></td>
<td><strong>Session 6</strong></td>
<td><strong>Session 7</strong></td>
</tr>
<tr>
<td>4-D The Salt Shake Down – Bridget Britton, OSU Extension Want to learn how much sodium we consume at restaurants, and ways to decrease it? Hands-on menu reading and making substitutions for lower sodium options.</td>
<td><strong>Session 8</strong></td>
<td><strong>Session 9</strong></td>
<td><strong>Session 10</strong></td>
<td><strong>Session 11</strong></td>
</tr>
<tr>
<td><strong>Session 4</strong></td>
<td><strong>Session 5</strong></td>
<td><strong>Session 6</strong></td>
<td><strong>Session 7</strong></td>
<td><strong>Session 8</strong></td>
</tr>
<tr>
<td><strong>Session 5</strong></td>
<td><strong>Session 6</strong></td>
<td><strong>Session 7</strong></td>
<td><strong>Session 8</strong></td>
<td><strong>Session 9</strong></td>
</tr>
<tr>
<td><strong>Session 6</strong></td>
<td><strong>Session 7</strong></td>
<td><strong>Session 8</strong></td>
<td><strong>Session 9</strong></td>
<td><strong>Session 10</strong></td>
</tr>
<tr>
<td><strong>Session 7</strong></td>
<td><strong>Session 8</strong></td>
<td><strong>Session 9</strong></td>
<td><strong>Session 10</strong></td>
<td><strong>Session 11</strong></td>
</tr>
<tr>
<td><strong>Session 8</strong></td>
<td><strong>Session 9</strong></td>
<td><strong>Session 10</strong></td>
<td><strong>Session 11</strong></td>
<td><strong>Session 12</strong></td>
</tr>
<tr>
<td><strong>Session 9</strong></td>
<td><strong>Session 10</strong></td>
<td><strong>Session 11</strong></td>
<td><strong>Session 12</strong></td>
<td><strong>Session 13</strong></td>
</tr>
<tr>
<td><strong>Session 10</strong></td>
<td><strong>Session 11</strong></td>
<td><strong>Session 12</strong></td>
<td><strong>Session 13</strong></td>
<td><strong>Session 14</strong></td>
</tr>
<tr>
<td><strong>Session 11</strong></td>
<td><strong>Session 12</strong></td>
<td><strong>Session 13</strong></td>
<td><strong>Session 14</strong></td>
<td><strong>Session 15</strong></td>
</tr>
<tr>
<td><strong>Session 12</strong></td>
<td><strong>Session 13</strong></td>
<td><strong>Session 14</strong></td>
<td><strong>Session 15</strong></td>
<td><strong>Session 16</strong></td>
</tr>
</tbody>
</table>

### Registration Form

Name ____________________________________________________________

Address _______________________________________________________

Phone __________________________ Email ________________________

Breakout Sessions: 1 _______ 2 _______ 3 _______ 4 _______

Payment Enclosed: $ __________ for _______ Adult(s) and/or _______ Student(s)

Please register on-line with credit card at go.osu.edu/eowia2020 or mail registration and payment to:

Women in Agriculture, Agricultural Administration, 34 Ag. Admin. Bldg., 2120 Fyffe Rd., Columbus, OH 43210