Hello Northeast Ohio Counties!

I hope all of you had a wonderful weekend and enjoyed our beautiful weather. Unfortunately, this week’s weather forecast doesn’t look as favorable for planting, but warmer weather will arrive sooner than later. While waiting for favorable planting conditions, use this time to scout for early season wheat diseases.

We are continuing to telework during the Stay Safe Ohio order but as always, we are here to assist you.

Have a great week!

Lee’s Monthly News Column
OSU Extension to continue teleworking arrangements during Stay Safe Ohio order

By: Cheryl Buck

Columbus, Ohio—Ohio State University Extension will continue operating via its teleworking plan for all employees and will keep physical OSU Extension offices closed to the public until further notice.

This remains in accordance with The Ohio State University’s decision that all university employees, with the exception of essential facilities workers, are to continue teleworking and remain off campus, physical distancing and taking all other precautions to stay safe.

Ohio Department of Health Director Dr. Amy Acton recently extended Ohio’s Stay Safe Ohio order through May 29. While some businesses and organizations in the state are starting to reopen as of early May, the guidelines for reopening offices via the governor’s office require personnel to work from home when possible.

OSU Extension has invested in technology that allows personnel to work from their homes. Programs intended to be held face-to-face have been adjusted to a virtual format, and personnel can still be contacted by phone or email. The physical Extension office in each county will remain closed through July 6, unless a decision is made by Ohio State to return sooner.

“We are considering the guidance from the governor’s office and are paying attention to how our local community leaders are planning for reopening businesses, we are following the university’s lead on the transition planning process and are still intending to telework for the near future while ensuring we are meeting the needs of our clientele and community partners,” said Jackie Kirby Wilkins, OSU Extension interim director.

“We are looking at a phased transition over time, and we have a transition team in place to ensure we have a comprehensive plan for the safe return of our employees and clientele,” said Wilkins.
Per previous Ohio State decision, all university in-person events are still canceled through July 6, and Extension activities planned through July 6 will continue to be held virtually or canceled. Ohio State will continue to evaluate and update plans based on evolving conditions with COVID-19.

OSU Extension’s recent investment in the technology needed to facilitate effective teleworking for the organization has helped Extension staff remain in continual contact with Ohioans during this challenging time. “Our clients, stakeholders, and other community members should continue to connect with any OSU Extension staff member via phone or email,” said Wilkins.

“Thank you to everyone for your cooperation and collaboration related to the coronavirus disease (COVID-19). Like Ohio State, OSU Extension remains committed to the health and well-being of our community and serving our communities in each county as this situation evolves. These are unprecedented times, and we sincerely appreciate your flexibility and support,” said Wilkins.

If you have questions, contact your local OSU Extension office. Visit extension.osu.edu/lao for office phone numbers and a direct link to each office’s website and staff directory.

**How Late Can I Plant Forages?**

By: Mark Sulc  
Source: [https://agcrops.osu.edu/newsletter/corn-newsletter/2020-12/how-late-can-i-plant-forages](https://agcrops.osu.edu/newsletter/corn-newsletter/2020-12/how-late-can-i-plant-forages)

The Ohio Agronomy Guide states that most cool-season perennial forages should be planted by the first of May. While some of you reading this article were able to plant forages by now, many of us (myself included) once again were not able to meet that deadline due to wet weather. So how hard and fast is the May 1 deadline, especially in a cold spring like we have experienced? Don’t we have a little more time to plant forages? I hate to say this, but the answer is neither simple nor clear cut.

The planting deadlines in the Ohio Agronomy Guide are based on data and years of experience of what is best management practice. The risk of stand
establishment problems increases as we move further and further past the published deadlines. Tell me it will not turn hot and dry in early to mid-June and that weeds won’t emerge and grow like gangbusters with all the moisture we’ve had, then I’ll tell you that forage plantings can still be successful. Unfortunately, the law of averages increases against forage establishment success the later into May that we plant.

Having said all that, I will still try to plant my experiments up until May 11-15 in central Ohio. For each of us, it is a matter of balancing the risk versus the cost and competing tasks at hand. The rainfall outlook for May is normal to above normal with summer going from wet to drier. Temperatures in May will average near normal, but summer temperatures are projected to be above normal. The warmer summer and projected trend towards drier conditions is concerning for young forage seedlings trying to become established in June and July. Late established seedlings will be at risk of being exposed to moisture and heat stress before they have a strong root system established.

A firm seedbed and good seed placement are essential when seeding late, as this will help moisture move through the soil to the germinating seeds resulting in fast emergence and better early growth. Summer annual weeds will now be emerging with the forage seedlings and we know that weeds are very competitive and destructive when they emerge at the same time as new forage seedlings. In pure alfalfa stands, we have herbicide options that can help against both broadleaf and grassy weeds, in forage grass stands we have only broadleaf herbicide options, and in grass-legume mixtures we have virtually no effective herbicide options during establishment. You might want to seed a pure stand now to provide more herbicide options, and then interseed the secondary species into the stand in August.

Consider your options and management carefully before planting perennial cool-season forages the next two weeks. I’ve had success and failures in the past with late plantings – but the law of averages is starting to work against us now. The latest I have planted alfalfa was in a small experiment on June 2 in central Ohio. In that case I planted Roundup Ready alfalfa, and we received adequate rainfall through June. The stand established well, and we were able to control weeds effectively with Roundup. But the stand really did not produce much yield that seeding year. I think we had one small cutting the entire growing season. It was as if the alfalfa was just growing the root system so the above ground growth remained short all summer. The following year it produced excellent yields though.

An alternative to consider now is to plant a short-season annual forage crop that can be harvested in late June and July, followed by planting the cool-season perennial forage stand in early to mid-August when the law of averages will once
again be more in favor of forage seedling establishment. This is what many of us had to do last year.

If you do plant in the next two weeks and the resulting stand ends up with thin spots, it will be important to work hard at keeping the thin areas from going to weed seed production this summer. You can interseed those areas with a no-till drill beginning in early August. This is true even for alfalfa seedings made this spring. Autotoxicity to alfalfa seedlings is not a big concern until the existing alfalfa plants are a year old. It is also possible to interseed alfalfa now into a thin stand of alfalfa that was planted last summer, and this spring is your last opportunity to do it; however, the discussion above about late plantings still applies to such interseedings.

**Direct Marketing of Meat**

By Rob Leeds, Garth Ruff, Peggy Hall, Jacci Smith and Tony Nye, OSU Extension

Source: [https://u.osu.edu/ohioagmanager/](https://u.osu.edu/ohioagmanager/)

Producers who are seeking to increase income are looking for different ways to market their livestock. Direct to consumer marketing of livestock products is one way producers are seeking to increase profits in their livestock sales. When exploring direct market possibilities there are several factors farmers must consider: regulations, consumer preference, marketing strategies and pricing.

**Regulation:**

The Ohio Department of Agriculture (ODA) and the local Health Department are the two agencies that are responsible for regulating sales of meat in Ohio. ODA oversees the processing plants and sets the food safety regulations for the state. The local health department enforces the food safety regulations at the local level.

Producers can slaughter and sell their own chickens (up to 1,000 birds), rabbits, or non-amenable meats directly at the farm without a license if that’s the only food they’re selling, or with a farm market registration if selling non-amenable meats along with other low risk foods. In order to sell “higher risk” meat products (including cattle, hogs, sheep and goats) to the public, producers must have their animals processed at a fully inspected plant under state or federal meat inspection.

Meat processed in a fully inspected state processing plant will have a label in the shape of Ohio stating, “OHIO inspected and passed by Department of Agriculture.” Federally inspected product will have a circle on the label that reads the same, substituting “OHIO” with “U.S.” If producers are making special claims (organic, grass feed, all natural) will also need to work with the fully inspected meat processor to develop an ODA approved label. In Ohio there are also custom exempt plants. Products processed
in custom exempt plants are intended for the producer’s own use, the meat cannot be resold. These products will be labeled “Not for Sale.”

Depending on the marketing strategy, selling meat from a fully inspected plant can require licensing. If a producer sells meat by taking orders, delivering the animal to the processing plant and then the customer picks up the product when the processing is complete; no retail license is required. If you want to deliver pre-ordered frozen meat you do not need a license from your local health department, so long as the meat is delivered directly to the individual from the meat processing facility, without intermediate storage. If you are storing your meat you will need a storage location, which is considered a warehouse, and this must be registered and inspected by ODA Food Safety Division. A home cannot be a warehouse, but you may be able to use your garage or an outbuilding to hold your freezers.

Some local health departments only require a warehouse registration when selling a fully inspected product from your residence, but some require additional licensing. In order to sell a fully inspected meat product from a farm market or farmers market, it is necessary to get either a mobile food establishment license or temporary food establishment license. A mobile food establishment license is for individuals that sell from a portable structure that routinely changes locations. This is the license that is used most often by farmer’s market vendors. A temporary food establishment license is for operations that operate for short periods of time. These licenses are obtained from local health departments. Each local health department sets fee and requirements for license in their area. Producers should work with the local health department when considering marketing options. For more information on licensing check out, “Selling Food from the Farm: When do you need a license?” at https://farmoffice.osu.edu/sites/aglaw/files/site-library/Food%20Sales%20at%20Farm%20law%20bulletin%20final.pdf

**Consumer Preference:**
To explore the possibility of direct marketing it's important to know customer’s preferences. For example; is there a market for whole, half or quarters? What cuts of meat are preferred? What quantity are customer seeking? What price points are relevant? Researching answers to these types of questions will help a producer satisfy customer needs. Many families do not have access to large freezer space. This reduces their interest in buying meat in bulk. Most families may only want to buy the cuts of meat that their families prefer. Some areas have a higher per capita income which will be a factor in the price sensitivity of potential customers. These are examples of factors that need to be considered when developing a marketing plan.

**Marketing strategy:**
It is important to consider how to get your product in front of your customers. There are several options including; customer pickup, farmers markets, and on-farm sales. Each
strategy has advantages and disadvantages. For example, selling the meat product via order and having the customer pickup the product at the processor’s requires no licensing on your part and marketing is done in advance of producing the product. However, potential customers must have adequate freezer space. Farmer’s Markets are a good way to increase your price per unit and develop visibility for your product. However more effort must go into marketing, market hours are limited and structured, licenses are required, and sales are in smaller units.

On-farm market sales offer the same chance to increase price per unit, gives control over sale hours, and reduces labor taking product to an offsite location. Concerns are a license is required, your farm must be kept presentable for customers, and you must be comfortable with and prepared for the liability of customers on farm property. Keep in mind that any method of direct marketing will include a focus on developing your brand and customer service. Developing these customer relationships may require a new set of skills for some producers. Producers need to pick a marketing strategy that fits their enterprise and personal goals.

**Pricing:**
In order to determine a sale price, a producer must know how much saleable product can be produced and the total costs of producing that product. Two common methods of selling meat include selling a portion of the carcass including whole, half, and quarter carcasses, and selling retail cuts. If producers are marketing their product by having customers pick up the finished meat product; carcass weight will be the end product. An estimated carcass weight is \( \text{Dressing percentage} \times \text{live weight} = \text{estimated carcass weight} \).

Average dressing percentages are:

- beef cattle – 62%
- dairy steers-59%
- market hogs- 74%
- shorn market lambs- 54%.

If producers are looking to sell retail cuts, then carcass cutting yield must be calculated to estimate your saleable product. Cutting yield is affected by fatness, muscling, and bone in vs boneless. Carcass cutting yield = \((\text{lbs of meat/carcass weight} \times 100)\).
A careful analysis of the cost of production is necessary to set a retail price for a product. The main costs associated with producing meat are: live animal input costs, processing fees, marketing costs, and profit margin. Producers should have all costs figured before pricing any end products. Before setting a price for each retail cut make sure to compare prices with local competitors. Local food producers should rarely be below a supermarket price. Through effective marketing of a quality product, a producer can build a brand and relationship directly with customers that leads to a profitable business venture.

**More information:**
Check out these videos from OSU Extension’s Ag Madness video series

“Direct Marketing Agriculture Products” from March 31, 2020
“How Producers Can Start Selling Food to Schools” from April 20, 2020
“Food Labeling & Regulations” from April 27, 2020

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**Hay making and the balancing act...quality vs. quantity!**

By: Stan Smith, PA, OSU Extension, Fairfield County (originally published in the Spring 2020 issue of The Ohio Cattleman)


With age comes experience, and with experience eventually comes some of those things that you can only shake your head at. This is the time of year when I usually begin to hear one of my favorites, “I don’t like to get in hurry with that first cutting . . . we don’t want it rained on, and I like to let it grow a little longer so we get more. Besides, even if made a little late, it’s still got to be better than snowballs!”

If nothing else, the last two springs have taught us this one thing. Not all first cutting forage is better than snowballs. In fact, the inability to make hay in a timely fashion has cost Midwest cattlemen lots in terms of hay quality that’s resulted in loss of cow condition, breed back issues, poor quality colostrum, and ultimately poor calf health and performance. If there was ever a time to carefully balance hay quality issues with the quantity of hay needed, weather permitting, this must be it! In fact, with some aggressive planning and a little cooperation from Mother Nature, perhaps we can have both quality and quantity this year. Following are some points to consider.

Generally speaking, we’re out of quality hay in Ohio and have been for the better part of two years. The condition of some of our cows confirms it, the price of hay at auction markets confirms it, and laboratory forage analysis confirms it. Not only have the last
two years proved to be challenging for forage harvest, but they arrived with little hay inventory on hand. As we approach the end of April, cows need feed and to add insult to injury, soil conditions for grazing around much of the state have not been the best and may not be great for mechanical harvest either. Regardless, hay needs to come off in a timely fashion.

The first reason is quality. Regardless how tall it gets; the maturity and quality clock has been ticking since forages broke dormancy last month.

We need tonnage to replenish inventory. Getting first cutting off early should result in a more aggressive regrowth, and hopefully the opportunity to harvest an extra cutting in 2020.

Lactating cows need high quality feed now if there’s any hope of getting them bred back in a timely fashion this year. If grazing conditions are less than ideal this spring, careful consideration must be given to whether there’s benefit to pulling cows back off grass after a quick first pass (if and when soil conditions have permitted!) and feeding some early made, high quality hay and perhaps even supplementing it with some additional energy.

An early made first cutting not only guarantees quality that’s been lacking in our forages during recent years, but perhaps more importantly, also allows the opportunity for an extra cutting in 2020. Another opportunity would be the ability to graze the regrowth earlier in the season, thus allowing pastures that were stressed late into fall and throughout winter and early spring a chance to rest.

As an aid to balancing the quality versus quantity conundrum, consider these suggestions:

- Consider not making an annual fertilizer application prior to the first cutting. Most years it results in more first cutting forage than can be harvested in a timely fashion.
- Instead, make the first fertilizer application of the year immediately after first cutting in an effort to boost production of a high quality second cutting.
- Be prepared to wet wrap, or chop and ensile part or all of first cutting in an effort to get it off more timely.
- Beginning with the first bale you make, plan to inventory similar qualities of hay/forage together and keep record of where they’re located. This allows for easy access for forage testing, and also for feeding those different quality...
forages once test results come back and a feeding strategy is developed around those results.

- If soil conditions are allowing grazing animals to do damage to pastures, don’t hesitate to graze quickly and lightly, and then pull animals in and feed first cutting until soil conditions allow proper grazing. Proper pasture rest periods can be just as important in spring as in late summer with regard to yearlong productivity of the forage.

Frankly, the concern for choosing between quality and quantity is no challenge at all. We can have both . . . and need both!

Crops sown in a uniform spatial pattern produce higher yields and reduce environmental impact

By University of Copenhagen
Source: https://www.eurekalert.org/pub_releases/2020-04/uoc-csi042820.php

One of the greatest challenges facing humanity is how to grow more food while reducing the negative impacts of agriculture upon the environment. Our ability to do so requires ever-more efficient and sustainable agricultural practices. The promising news is that researchers have found out that the spatial pattern in which a farmer sows their crops is an important determinant of what they will reap.

"In the vast majority of cases, higher yields and fewer weeds are the result of sowing crops in a more uniform, grid-like pattern, where each plant is equidistant from its neighbouring plants, both within and between rows," says Professor Jacob Weiner of the University of Copenhagen's Department of Plant and Environmental Sciences. Professor Weiner and his colleagues from Northeast Agricultural University in China conducted a large metastudy of research in the area to discover the impact of uniform spatial patterns on crop yields and weed growth. The study, now published in the prestigious serial Advances in Agronomy, demonstrated that a uniform seeding pattern resulted in higher yields in 76% of trials, and fewer weeds in 73% of trials.

In particular, the researchers looked at three of the world's most widely-cultivated crops: wheat, maize and soybean. In many studies, yields were roughly 20% higher, while one study yielded 60% more wheat and another, up to 90% more soybeans. With regards to weed growth, several studies resulted in more than a 30% reduction in weeds when traditional, less precise sowing was replaced by the uniform sowing pattern.

"Our own research has demonstrated the positive effects of the uniform sowing of wheat when weeds are present, but the new study shows that this benefit extends to other crops, both with and without competition from weeds" says Professor Weiner. Win-win for the environment
Today, a typical seeding machine sows in a fairly precise distance between rows. However, within each row, the distance between seeds is random, meaning that some plants have close neighbours, while others have distant ones.

Conversely, when seeds are sown in uniform grid patterns, roots spread and occupy soil space faster, while more readily and efficiently absorbing nutrients. This helps to reduce the release of nutrients such as nitrogen.

"From an environmental perspective, it's win-win. There is less nitrogen runoff, and herbicide can be reduced because there are fewer weeds to contend with. This ability to increase yields and mitigate environmental impacts contributes to more sustainable agriculture," according to the professor.

Above ground, the uniform grid pattern is advantageous because crop plants shade one another less during the early part of the growing season. One study estimated that crop leaves covered the ground several weeks sooner when sown in a uniform sowing pattern.

"It's a bit like a forest plantation, where trees are planted in a uniform pattern. In this way, there is nothing new to this principle. It just hasn't been seen as important for crops as it is for trees. People didn't believe that a sowing pattern could have such a significant impact for crops. But we were able to conclude that it does," says Jacob Weiner.

Technically, this type of precision sowing has been a challenge.

"But now, there are machines suited for the job and new ones are constantly being developed. This applies to both precision seeders and robots. You might pay more for the machine, but it's a one-time expense that pays itself off," says Jacob Weiner.

FACTS:
In the vast majority of cases, an even distribution of crops within rows results in higher yields and fewer weeds. When the distance between rows is reduced as well, even greater outcome are possible.

The study also demonstrates that uniform sowing patterns are less effective in drier areas, while more effective in wetter ones.

The study was conducted by Ping Lu and Baiwen Jiang from Northeast Agricultural University in Harbin, China and Jacob Weiner from the Department of Plant and Environmental Sciences at the University of Copenhagen. The study is published in the acclaimed serial, Advances in Agronomy.
Lee’s Monthly News Column
Hello Trumbull County! Is it just me, or has this seemed like the longest spring ever? As we have all been cooped up at home these past few weeks there has been an increased interest in home gardening, so much in fact that many seed suppliers have not been able to keep up with demand. I thought it would be a good idea to revisit some of gardening basics for those who are starting their first garden.

The biggest mistake I see many first time gardeners make is trying to start a garden too early. While there are a few crops that can be planted in April, the majority of vegetables should be planted after May 15. Why May 15? That is the date when the chance of frost has most likely passed for Trumbull county. Before May 15 your best choices for starting a garden include peas, radishes, kale, spinach and other crops that can tolerate cold soil temperatures and a light frost. If you are not sure when to plant, you can always refer back to the information on the seed packet.

The seed packet is going to be your best source of information that is specific to your crops and variety. Pumpkins are a perfect example of why the seed packet is so important. There are dozens of pumpkin varieties available from jack-o-lanterns, pie, decorative, big, small, ugly, and the list goes on and on. Each of these are technically pumpkins and have an ideal planting date from May into June, but their distinctive features make them a variety that will alter their maturity. Looking through my seed packets I have four varieties with differing maturities—49 days, 90 days, 100 days, and 120 days.

Ideally, I would want my pumpkins to be fully mature and ripe by the end of September or early October. If they mature too early I will be trying to carve a rotten pumpkin with my kids, or the decorative pumpkins will melt away on the porch. If I planted the 49 day maturity variety on June 1, I could expect to harvest those pumpkins around July 19. That’s way too early. For this variety I may try to plant at the beginning of August. The 120 day pumpkin is a completely different story. If I planted those on June 1, I could expect to harvest around the last week of September. This variety I may even want to start the seeds indoors around May 15 to make sure that they have a good start going into the season. Why start indoors, and not just plant earlier in the garden? Well, pumpkins don’t like cold soils, and they will likely not germinate in the garden. How did I know that? It says it on the seed packet.

Pumpkins are one of the most extreme examples that you may encounter in your garden. For most of the gardening standards—green beans, tomatoes, zucchini, etc. you can safely plant after May 15. Cucumbers you should wait to plant until June when soil temperatures are warmer.

The seed packet can also tell you if a variety is disease resistant. Zucchini, squash, cucumbers, and other cucurbit varieties should be selected based on disease
resistance to downy and powdery mildew. Those are the two biggest challenges you will face in NE Ohio. Of course, if you cannot find disease resistant varieties this year, don’t worry, you will still get a crop but it may be slightly less.

Gardening can be intimidating, but just remember that we have been gardening for thousands of years. Humans could plant a garden before we invented the wheel, I think we will be fine. If nothing else, don’t overthink it and put some seeds in the ground and watch what happens, but you are better off to wait until May 15.

Also, don’t overthink the layout or size of your garden. Remember that whatever size of garden you choose, you will have to weed it. Starting out with a ¼ acre garden sounds great until you are pulling nutsedge for days to keep it under control. Be realistic with your garden, and only have your garden as large as you need. Your garden can be as small as a coffee can, or as big as your entire yard. Find the size that fits for you. If you have any questions on gardening you can still reach us at OSU Extension. We are working from home but we are able to take your calls and emails.

Take care, and stay healthy!

Lee Beers can be reached at beers.66@osu.edu or 330-638-6738

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