Hello, Northeast Ohio Counties!

Not much has progressed for planting in the last week due to the wet weather, although I did see a couple planters running yesterday as I drove through the county. After the rain today, the forecast for the rest of the week looks promising. Clear skies forecasted for Wednesday, Thursday, and Friday followed by a 30% chance of rain on Saturday.

With a window like that I know a lot of hay will be made this week. If you are trying to make dry hay this week, be sure to keep an eye on the moisture. Our wet soils this time of year will make it harder to get to an appropriate moisture content to prevent spoilage. As you know, wet hay also leads to barn fires. Baling at a moisture below 20% is a good place to prevent both spoilage and fires. You can read more about preventing hay fires here: http://articles.extension.org/pages/66577/preventing-fires-in-baled-hay-and-straw

Lee Beers & David Marrison
Extension Educators
Ag & Natural Resources
OSU Extension Hires Summer College Student Assistant
Contributed by: Katie Daugherty

The Ohio State University Extension Office welcomes Katie Daugherty as the 2018 Summer College Student Assistant with the Ashtabula Extension Office this summer. Katie comes from an extensive 4-H background and is very excited to be in this role. She grew up in Geauga County within the 4-H program as a member for twelve years, taking a variety of different projects such as; swine, rabbits, pygmy goats, market steers, poultry and continues to show in open class at the fair.

Katie was also very involved with the camping program in Geauga County. She attended 4-H Camp Whitewood as a camper, was a 4-H Camp Counselor for many years, and continues to be involved as the Assistant Dean of Women for Geauga County.

Katie is currently in her senior year at West Virginia University in Morgantown, West Virginia and is pursuing a Bachelor’s Degree in Agricultural and Extension Education where upon graduation she hopes to be a high school Agriculture teacher or become an Extension Educator. Through this internship, Katie hopes to learn more about the various branches of Extension and find her niche within this field of Agricultural Education. She is very passionate about the 4-H program and the field of agriculture overall, and the vast opportunities that both provide for many people.

In her role as Summer Intern, Katie will be working on many events such as AG Day, the 4-H Speaking Contest, preparing for Camp, Cloverbud Camp along with Cloverbud Fun Days, and preparing for the Ashtabula County Fair and the events leading up to the fair as well. She is very excited to work on these events throughout this summer and hopes to meet many new people while working for Ashtabula County Extension. Katie is very excited to have this internship opportunity this summer and learn more about the field of Extension which will help her in continuing to pursue a career in Agricultural Education.

Cutting Height in Hay Fields: How Low Can You Go?
By: Dwane Miller, Extension Educator, Agronomy, Penn State University
Source: http://u.osu.edu/beef/2018/05/16/cutting-height-in-hay-fields-how-low-can-you-go/#more-5147

While many parts of Pennsylvania have yet to take a cutting of hay in 2018, I was on a farm in Chester County on Monday (5/7/18) where first cutting alfalfa/orchardgrass was made last week. As you head to the field this year, it’s important to pay attention to cutting height in your hay crop. One of our goals as farmers is to maximize our yield; however, cutting a hay crop too low can lead to several negative issues. The introduction of the disk-type mowers (discbines)
allows for cutting very close to the ground. I’ve seen many fields that have been “scalped” right to ground level. This differs considerably from the older sickle bar mowers (haybines), whose technology required some level of stubble height remain. Stand longevity can be compromised when the crop is cut too low. As a general rule, alfalfa can be cut closer to the ground than our grass hay crops. We need to think about where energy reserves are stored in the crop. For alfalfa, carbohydrates are stored below ground in the taproot. Our grass hay crops store their energy above ground in the stem base or tillers. Frequent mowing at a close height will continue to deplete these energy reserves, resulting in stand longevity issues.

The second consequence for mowing too close to the ground is increased ash content of the forage. All forage has a natural ash content of approximately 6%. However, mowing too closely with disk mowers can add soil to the crop, and increase the ash content by as much as 10-12% (18% ash content in total analysis). If we all had table-top smooth fields, it would also be much easier to make a closer cut across all fields. However, things such as groundhog holes and the unevenness of fields can add to increased ash content of our harvested forage.

So, the million dollar question is how low can you go? The best answer is…it depends! The first question I always ask is – is it a solid stand or a mixed stand? If you have grasses involved, you must keep cutting height higher than a pure stand of legume, if you want to keep the grass in the stand. Keep in mind these are minimum recommendations; it’s okay to mow higher than the numbers below. Here are my minimum cutting height recommendations:

**Alfalfa or Clover**
- 2" minimum. Some literature shows a cutting height of 1” will not reduce stand longevity, but remember the increased ash content issue. Also, keep in mind that frequent cutting at early maturity will continue to deplete carbohydrate reserves. One cutting of alfalfa should be allowed to reach the bloom stage each year.

**Cool Season Grasses (Orchardgrass, Timothy)**
- 4” during the establishment year
- 3” minimum during production years. This is where we see most of our stand longevity issues. Frequent cutting of cool season grasses at a low height will continue to deplete energy reserves.

**Mixed stands**
- You must manage for the predominant species. Do you have a grass stand with some alfalfa, or an alfalfa stand with some grass?
- Alfalfa with some grass: 2.5” minimum
- Grass with some alfalfa: 3” minimum (if you want to keep the grass stand!)
**Cressleaf Groundsel in Wheat and Hay**
By Mark Loux and Jeff Stachler

It’s definitely a big year for cressleaf groundsel (*Senecio glabellus*), the yellow-flowered weed that can be seen about everywhere right now. While it is most often found in no-till corn and soybean fields that have not yet been treated with burndown herbicides, there seems to be an above-average number of wheat and hayfields and pastures with substantial populations.

Cressleaf groundsel can be identified by its hollow and grooved stem with a purplish color, and yellow sunflower-type flowers. It is a winter annual that emerges in late summer into fall, and can infest late-summer seedings of forages and hay, and fall seedings of wheat. It can be controlled with herbicides in most crops, ideally in the fall or early spring when plants are small and most susceptible to herbicides.

At this time of the year, plants are flowering and will be going to seed, thus ending their life cycle. Applying herbicides to hay fields at this time probably won’t do much to reduce the risk of toxicity to animals (and it’s too late to apply any herbicides to wheat). Plants that have flowered are more difficult to control, and will still be there even if killed by herbicides. Major management goals at this time are mowing infestations soon enough to prevent seed production, and deciding what the risk of toxicity in hay or straw is based on the level of infestation. Cressleaf groundsel should not be present in hay fields following the first cutting. However, it is advisable to scout fields in late fall for the presence of newly emerged plants, and treat with herbicides if necessary.

Cressleaf groundsel is poisonous to cattle, horses, goats, sheep, and humans due to the presence of pyrrolizidine alkaloids (PAs). Symptoms include weight loss, unthriftiness,
poor hair coat, anorexia, behavioral changes, sunscald, aimless walking, diarrhea, jaundice, liver damage, and possibly death. All parts of the plant are toxic. Drying or ensiling the plants during the hay or straw making process does not reduce the toxicity of cressleaf groundsel. Historically, no confirmed cases of poisoning by S. glabellus have been reported by the Ohio Department of Agriculture’s Animal Disease Diagnostic Laboratory, although liver lesions suggestive of PA poisoning have been observed on rare occasions.

Although the presence of the occasional plant in a hay or wheat field is probably not cause for concern, producers are advised to avoid harvesting areas of the field that have high concentrations of the plants. Or bale and discard hay or straw from those areas of the field, if this is more desirable than leaving the plant residue in the field.

This is not a new problem, and we have a fact sheet available on cressleaf groundsel at the OSU Weed Management website – http://u.osu.edu/osuweeds. Hover over “weeds”, and then click on “other” to get to it.

**Youth on the Farm: What Type of Farm Work Can They Perform?**

_Peggy Hall and Catharine Daniels, OSUE Agricultural & Resource Law Program_

_Source: https://ohioaglaw.wordpress.com/2013/06/10/youth-on-the-farm-what-type-of-farm-work-can-they-perform/

It’s planting season in Ohio, which creates both a high need to employ youth on the farm and the challenging task of sorting out youth labor laws. Labor laws are intended to protect youth from risks and potential harms that can arise in hazardous jobs such as farm work. Before hiring youth to help with hay baling or other types of farm tasks, be sure you know the laws that govern the employment of youth in agricultural jobs. Review the following to gain an understanding of these important laws.

**Whose child?**

The relationship of the minor you are hiring is important because the law treats your own children and grandchildren differently than non-related children working on your farm. If the minor you hire is your own child or grandchild, the law allows you to have the child do any type of job, including agricultural jobs considered “hazardous” under state and federal labor laws. Step children, adopted children, foster children and other children for whom you are the guardian are also exempt from the hazardous jobs regulation.

**For other children, age matters**
For other youth who are not your own child or grandchild, the type of work you may assign the child depends upon his or her age. “Other children” includes strangers, students, neighborhood children, friends, nieces, nephews and any other relatives. Only the older youth may perform “hazardous” farm work, as follows:

- **16 and 17 year olds** – May perform any type of farm job including agricultural jobs considered hazardous.
- **14 and 15 year olds** – May not perform any job listed as hazardous unless the child holds a 4-H or vocational agriculture certificate of completion for tractor operation or machine operation and the employer keeps a copy of the certificate on file with the minor employee’s record.
- **12 and 13 year olds** – May not perform any job listed as hazardous; may only perform non-hazardous jobs if with written consent for employment from a parent or guardian or if the child is working on a farm that also employs the child’s parent or guardian.
- **11 year olds and younger** – May not perform hazardous jobs. May only perform non-hazardous farm work if a parent or guardian gives written consent and if the child will be working on a farm where employees are exempt from minimum wage requirements. A farm is exempt from minimum wage if the farm had 5,000 or fewer man-days of agricultural labor in the preceding calendar year; a man-day is any day where a worker performs at least one hour of agricultural labor.

**What jobs are “hazardous”?**

Ohio has adopted the federal government’s determination of “hazardous” activities for youth, which is based upon the risk of harm posed by an activity. Your own child or grandchild may perform hazardous tasks at any age, but other youth working on the farm must be at least 16 years of age to participate in these “hazardous” tasks:

- Operating a tractor with over 20 PTO horsepower, or connecting or disconnecting an implement or any of its parts to or from such tractor.
- Operating or assisting to operate (including starting, stopping, adjusting, feeding, or any other activity involving physical contact associated with the operation) any of the following machines: corn picker, cotton picker, grain combine, hay mower, forage harvester, hay baler, potato digger, mobile pea viner, feed grinder, crop dryer, forage blower, auger conveyor, unloading mechanism of a nongravity-type self-unloading wagon or trailer, power post-hole digger, power post driver or nonwalking type rotary tiller, trencher or earthmoving equipment, fork lift, potato combine or power-driven circular, band, or chain saw.
- Working on a farm in a yard, pen, or stall occupied by a bull, boar or stud horse maintained for breeding purposes, a sow with suckling pigs, or a cow with a newborn calf with umbilical cord present.
- Felling, bucking, skidding, loading, or unloading timber with a butt diameter of more than six inches.
• Working from a ladder or scaffold (painting, repairing, or building structures, pruning trees, picking fruit, etc.) at a height of over 20 feet.
• Driving a bus, truck or automobile when transporting passengers or riding on a tractor as a passenger or helper.
• Working inside a fruit, forage, or grain storage designed to retain an oxygen deficient or toxic atmosphere; an upright silo within two weeks after silage has been added or when a top unloading device is in operating position; a manure pit; or a horizontal silo while operating a tractor for packing purposes.
• Handling or applying (including cleaning or decontaminating equipment, disposal or return of empty containers, or serving as a flagman for aircraft applying) agricultural chemicals classified under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 135 et seq.) as Category I of toxicity, identified by the word “poison” and the “skull and crossbones” on the label or Category II of toxicity, identified by the word “warning” on the label.
• Handling or using a blasting agent, including but not limited to dynamite, black powder, sensitized ammonium nitrate, blasting caps, and primer cord.
• Transporting, transferring or applying anhydrous ammonia.

For example, if 14-year old Riley is Farmer Smith’s child or grandchild, the law allows Riley to drive a tractor for Farmer Smith. But if Riley is not Farmer Smith’s child or grandchild, the law prohibits Riley from driving a tractor for Farmer Smith unless Riley holds a 4-H or vocational agriculture certificate of completion for tractor operation, because driving a tractor is a “hazardous” activity for 14-year olds.

What if I violate the “hazardous” jobs regulations?
Under Ohio law, you can be found guilty of a third degree misdemeanor for allowing a minor under the age of 16 to perform a hazardous job on your farm; penalties are up to a $500 fine and 60 days in jail for each violation. Additionally, if the child is injured while engaged in an illegal hazardous activity, you could be assessed with an increased workers’ compensation premium.

How can I comply with the law?
To ensure that you don’t violate the labor regulations on hazardous jobs for youth, take a few precautions to protect both you and your child employee:

• Verify the child’s age and keep records of your verification.
• Know the list of agricultural work that is considered hazardous.
• Remember that only your children or grandchildren are exempt from the hazardous jobs regulation; consider nieces, nephews, cousins and other relatives as “other children” who are subject to the hazardous jobs rules.
• Ensure that your child employees know which jobs they may do and which jobs they may not perform.
• Review safety practices with your youth employees.
• For 14 and 15 year olds who have completed a 4-H or vocational agriculture tractor or machinery operation certificate, maintain a copy of the certificate with the employee’s records.

Spray Drift 101 – May 18, 2018
By Doug Doohan

Crop samples submitted to the OARDC Weed Lab (http://owl.osu.edu) with suspected herbicide drift injury symptoms sky-rocketed in 2017 and early indications are for the same trend in 2018. This is happening mainly because vegetables and fruits are much more sensitive to the 2,4-D and dicamba herbicides grain farmers are now using to kill weeds that are no longer sensitive to glyphosate alone. There is always some drift; but when crops have an elevated sensitivity to the compounds moving in the environment, everyone sees the effect.

Already in 2018, most grain fields have received burndown sprays containing 2,4-D (and some with dicamba) mixed with glyphosate. Predictably samples from injured fruit and vegetable fields, and orchards are being submitted for diagnosis. So far, roughly 50% of the samples received are not showing symptoms characteristic of herbicide drift, and that’s significant because our lab rarely receives the samples until they have cleared a pathology screen. So, while crop injury from drift is up significantly, there are still relatively few instances of damage where drift is clearly the culprit.

A general deterioration in farm community relationships has already occurred in some states, as a result of recent conflicts arising over drift. Grain, vegetables, fruits, landscapes and natural ecosystems have been damaged sometimes with tragic consequences, following the expanded use of 2,4-D and dicamba. Human nature being as it is, we all tend to look outside to explain our problems before we look inward. Considering this, it is important to consider other possible causes of crop injury before assuming occurrence of drift from the neighbors’ fields.

• Keep in mind that the injury symptoms associated with 2,4-D and dicamba are indirect responses of the plant to stress, and may have other causes. For example injury caused by glyphosate, used by most vegetable farmers, can sometimes resemble injury caused by 2,4-D.
• Volatile by-products of incomplete combustion (think of heating a greenhouse or high tunnel) are also known to cause symptoms on bedding plants not unlike those caused by herbicides.
• Inadequate decontamination of spray equipment used to apply glyphosate, 2,4-D or dicamba may leave behind trace amounts that are enough to cause injury in a subsequent application to a sensitive crop.
• Carryover of herbicides used on previous rotational crops, sometimes going back two growing seasons, may cause symptoms on vegetables that can be confused with those resulting from 2,4-D or glyphosate drift.
• Environmental conditions, in particular flooding during and after crop establishment, may induce symptoms that can be confused with herbicide injury, or they may exacerbate the effects of exposure to trace amounts of residual herbicides in the soil that would normally have no affect.

So, 'what’s a farmer to do?', to reduce the likelihood of being hurt by drift from nearby fields?

• Communicate! Talking with the neighbors is first and foremost. This can be difficult considering consolidation of grain farms and rental of land; but communication is vital in protecting your crops. Explain that the crops you grow are very sensitive to herbicide drift, and that drift can result in a complete yield loss of a very high value harvest.
• Communicate! Sign up with the Ohio Sensitive Crop Registry. Steve Smith, Director of Agriculture with the Red Gold Company, reports that incidents of tomato crop injury from drift have declined dramatically since they required their contract growers to register with the sister-program Field Watch (previously known as Drift Watch). We know that most, if not all, commercial applicators check the Ohio Sensitive Crop Registry before going out to apply herbicides, so registering is clearly the cheapest (it is free) insurance available.
• Communicate! Steve also reports that placing “No Drift” signs along field edges helped tremendously.
• Pay attention to pesticide applications on nearby (and not so nearby) fields. Applications in early morning and evening are especially prone to inversion conditions that keep tiny droplets of spray suspended and prone to drift. It will be prudent to keep a written list of observed applications with date, time and observed conditions (are tree branches in motion, flags straight out, etc?). Photographs taken with a smart phone can be location, date and time stamped.
• Scout your fields at least every 2-3 days paying special attention to field edges where incoming drift will likely have the greatest effect. Symptoms of glyphosate injury usually take 3 + days to become apparent. Symptoms of 2,4-D and dicamba can develop in less time, often within 24 hours, when growing conditions are ideal.
• If you see injury anywhere scout the entire field and the hedgerows. Look for patterns. Drift usually leaves a path of injured weeds, shrubs and trees (look up) along the way. Trace the path to its apparent origin.
• Photos are very important but equally so, you need a written description of what each photo is attempting to illustrate and where it was taken. Photograph injured plants and plants that are healthy. Check each photo to verify that it shows the symptom you are
Northeast Ohio Agriculture

Ashtabula and Trumbull Counties

- If it doesn’t, take another in different light, from a different angle, or distance.
- Create a map of the field or mark an existing map, showing where photos were taken and outlining areas affected and not affected.
- Communicate! Talk to the neighbor, or the applicator if it was a commercial job. Explain that you have injury, that you have reason to suspect it was drift, and that you are monitoring the situation. Ask them to identify what pesticides were applied.
- Maintain normal growing practices. If you seek a settlement you must have yield data, and if yields are lower than expected you do not want your failure to maintain the crop to be the reason.
- The decision to contact the ODA is personal, although an argument can be made that pesticide applications resulting in drift should always be reported. If you contact ODA there is no cost to you for their services, including their analysis of crop tissue for pesticide residues, but once you have contacted them be certain that they will conduct an investigation.

Thinking about the above points it should be obvious that maintaining high quality and complete field records, year in and year out, is important when drift occurs. Being able to 1) substantiate your own crop and pest management practices validates that you were not the cause of the problem, and 2) past yield records from the field affected will help support a claim for lost yield.

Remember to communicate with your neighbors each year. Keep in mind that many grain farmers have no idea how valuable an acre of produce can be.

Finally sign up with the Ohio Specialty Crop Register. Past experience indicates this may be the single most important step you can take to protect yourself.

Monitor for Ticks When Working Pasture
By: Timothy McDermott DVM, OSU Extension Educator, Franklin County
Source: http://u.osu.edu/beef/2018/05/09/monitor-for-ticks-when-working-pasture/#more-4985

There has been an increase in tick-vectored diseases in Ohio to livestock, companion animals and humans over the last several years. This has occurred as the different tick species that inhabit Ohio have increased their habitat range and gradual spread from the south and east towards the north. The increase in awareness of tick-vectored diseases is now only starting to catch up as a public and livestock health awareness priority. Ticks have been found to vector not only bacterial diseases, but new-vectored viral diseases as well as allergic reactions have increased in frequency and severity. As the producer gets ready for spring production work, they have multiple potential chances to interact with ticks. This might include inspecting fence for post-winter repair, checking on spring calving, walking pasture to evaluate forage stands or
moving cattle to different paddocks to take advantage of lush spring growth. Understanding tick habitat preferences, knowing what life cycle stages are present and making a personal protective biosecurity plan will allow the producer to decrease their chances of a tick-vectored disease concern.

The ticks of consequence in Ohio are hard shell ticks, in the Animal Kingdom, Phylum Arthropods, Class Arachnids, and Subclass Acari. This means that they are related to spiders. They do not fly and use a hunting method called “questing” where they use their back pair of legs to hold onto vegetation and the front pair of legs to grab prey as it passes by. This is useful information for prevention as you encounter a tick when you enter the habitat they prefer.

The main Ohio tick species are the Brown Dog Tick, the American Dog Tick, the Blacklegged or Deer Tick and the Lone Star Tick. A common misconception about ticks is that they are only present during spring or summer. Most ticks have a one-year life cycle, except Blacklegged (Deer) ticks, which have a two-year life cycle. Different growth stages are more active during different times of the year. Right now in Ohio according to tickencounter.org, the ticks that are most prevalent are adult American Dog ticks and adult Blacklegged ticks. As the spring progresses to summer, the Lone Star Tick will increase in frequency.

Each tick species has its preferred habitat and individual characteristics. The preferred habitat of the American Dog Tick is pasture grasses and meadows while the preferred habitat for Blacklegged ticks are dense woodlands. The current adult stages will look to feed on larger mammals such as deer, cattle, small ruminants, horses and humans. It is important for the producer who will enter tick habitat to have a personal protection plan to prevent tick attachment and potential disease transmission. Producers should wear long pants and shirts, preferable light colored to be able to see the ticks. The preferred repellant strategy is to wear permethrin treated clothing, as this will repel ticks when they are questing to find blood meal sources. Clothing can be purchased already treated from major outdoor or work clothing suppliers as well as clothing can be treated at home using a permethrin spray or concentrate labelled for use on clothing. Should a producer find an embedded tick on their person, the tick should be removed and saved as ticks can now be tested to see if they carry infectious disease. Details on how to treat clothing with permethrin, correct tick removal as well as laboratories that will test ticks for disease can be found at tickencounter.org.
A prevention strategy for tick disease in livestock is challenging. Treating a pasture for ticks is not feasible and full daily close visual examination of a herd is difficult in many grazing systems. A producer should try to keep pasture fence lines mowed to suppress weeds and shrubby habitat and try to minimize exposure of livestock to wild animals who are the preferred blood meal for ticks. It is important for a producer to make a plan to deal with potential tick encounters when working their livestock. Having a personal biosecurity plan for repellant clothing, removal strategies, and post-pasture tick checks are critical to keep the producer safe and decrease the chances of tick-vectored disease. If a producer suspects a tick-vectored disease is present in one of their animals, they should contact their veterinarian immediately.

**Ohio Enterprise Budgets for 2018**
by: Barry Ward, Leader, Production Business Management, Ohio State University Extension

Budgeting helps guide you through your decision making process as you attempt to commit resources to the most profitable enterprises on the farm. Crops or Livestock? Corn, Soybeans, Wheat, Hay? We can begin to answer these questions with well thought out budgets that include all revenue and costs. Without some form of budgeting and some method to track your enterprises’ progress you’ll have difficulty determining your most profitable enterprise(s) and if you’ve met your goals for the farm.

Budgeting is often described as “penciling it out” before committing resources to a plan. Ohio State University Extension has had a long history of developing “Enterprise Budgets” that can be used as a starting point for producers in their budgeting process. Newly updated Enterprise Budgets for 2018 have been completed and posted to the farmoffice website: [https://farmoffice.osu.edu/farm-management-tools/farm-budgets](https://farmoffice.osu.edu/farm-management-tools/farm-budgets)

Enterprise Budget projections updated for 2018 include: Corn, Soybeans, Wheat, Alfalfa Hay; Alfalfa Haylage, Corn Silage, Swine – Farrow to Wean, and Swine –Wean to Finish. Our enterprise budgets are compiled on downloadable Excel Spreadsheets that contain macros for ease of use. Users can input their own production and price levels to calculate their own numbers. These Enterprise Budgets have color coded cells that allow users to plug in numbers to easily calculate bottoms lines for different scenarios. Detailed footnotes are included to help explain methodologies used to obtain the budget numbers.

**Raised Beds Becoming Popular**
By: Ashtabula County Master Gardeners

Raised beds have become popular with gardeners for many good reasons. Their versatility allows them to address a variety of needs. By building beds above the ground surface and filling...
them with high quality soil, you can overcome challenges like poor existing soil or inadequate drainage.

If you want to provide irrigation, you can install a drip irrigation system as you build your bed without much excavation. Raised beds can be designed for accessibility needs by adjusting height, width, and comfort features for the needs of the gardener.

Many people find gardening with a raised bed easier than gardening at ground level. Adding a convenient place to kneel or sit while accessing the bed is a “comfort” feature most would appreciate.

Raised beds can help you extend the gardening season. A raised bed tends to warm earlier in the spring and stay warmer into the fall. Because they drain well, gardeners can plant and tend the garden sooner after a rain. The controlled width and size of the raised bed can make it easier to cover for season extension.

Raised beds can result in increased yields because they have better soil structure. A well planned raised bed can be worked without the need to step into the bed, greatly reducing soil compaction and the need for tilling. The bed can be planted more densely because the entire space is available for growing.

Raised beds do require some up-front labor and expense. They also tend to dry out more quickly in hot dry weather, requiring some extra watering. However, there is a wide range of raised bed options, starting with simple mounds of dirt to elaborate construction projects. If you are experimenting and not fully committed, pick a type that you can easily deconstruct next year if you change your mind.

The first step is to pick your site. A sunny, fairly level spot is best. You may be thinking of turning an existing garden or a landscape border into a raised bed. If you are creating a new bed, consider its orientation to the sun. A north-south orientation works well for low growing crops. If you will have a mix of heights, consider an east-west bed with taller plants on the north edge and lower growing plants on the south side still receiving full sun.

When designing your bed, width is a prime consideration. If you plan to be able to access the bed from both sides a 4’ width is optimal. If you will only be able to work from one side, then not much more than 2’ is best. The length can be whatever you choose.
The depth needs to consider both allowing ample space for root growth, usually 6” to 1’. This is especially important if you are putting the bed on a hard surface or hard packed soil. If the bed is too shallow, the roots will reach down and hit that barrier. Also consider your own height needs for accessibility. The taller and longer your bed, the more materials you will need, so remember your budget as well.

A simple raised bed created with a mound of soil is limited in height and must have sloped edges to keep its shape. It also requires a dedicated walkway around it to keep feet out.

Framed beds are easier to keep weed free and tend to have a neater appearance. Beds can be framed with a variety of materials including wood, stone, brick, cinderblock, corrugated steel, and plastic. Look for inspiration. There are many photos and gardening sites on line showing ways to construct a raised bed. If you want to skip the design phase look for pre-made raised bed kits now available in stores and on line.

Once you are ready to install your bed, a common concern is what to do about existing ground at the site. If it is already tilled and good quality soil, you can work additional soil, finished compost, peat moss, and well-rotted manure into the area to build up the height. If it is unbroken sod or a poor-quality surface, cover the area inside the bed with cardboard. This will help to prevent any existing grasses or weeds from growing through the bed.

You should fill your bed with the best quality materials you can afford. You may be able to source some soil from your yard or elsewhere. You are looking for good quality, chemical free top soil.

Garden centers, hardware stores, and home centers all sell garden soil, peat moss, and other soil amendments. Many stores offer soil calculators on line to help you figure out how much you will need to fill your bed. Your plants will appreciate the effort you make to provide a great growing environment.

If you have been thinking about trying a raised bed garden, this could be the year to give it a try.

*In 2018, Ashtabula County Master Gardeners will be covering a wide range of topics, indicating special interests among their members. If you would like a master gardener to write about a particular topic, call the OSU Extension Office at (440) 576-9008.*

**David’s Weekly News Column**
For Publication in the Jefferson Gazette on May 23 & Ashtabula County Star Beacon on May 27, 2018

Hello, Ashtabula County! What do Reann Eldred, Teresa Polchin, Katie Stokes, Allison Magyar, Brooke Poyer, Analese Marrison, Deanna Comp, Nicole Mann, David Riley, Calla Mazzaro,
Tracia Bailey, Kyle Peck, Kayla Lowery, Sydney Millard, Allison Crouch, Gina Hill and Elizabeth Holden and all have in common? If you guessed they are very bright, talented, and goal oriented young people, you are correct! Because of these qualities and many more, they were selected to be recipients of a 2018-2019 Agricultural Scholarship Fund Award.

The Ashtabula County Agricultural Scholarship Fund was founded on April 29, 1952 by a group of local leaders to help promote interest in the study of agriculture, home economics, environmental sciences, and natural resources. Since then, the committee has grown to include additional community scholarships which are open to any student regardless of the college major. This scholarship program is driven by a super group of Ashtabula County volunteers and supported by countless families, agribusiness firms and prior recipients.

This year, I am very pleased to announce the scholarship committee was able to present a total of $17,000 in scholarship money to seventeen outstanding young people. This is the second most money ever given in the history of the scholarship fund! It was a tough selection process for our committee as we were impressed with all the applications submitted for consideration. The scholarship recipients chosen were:

Raeann Eldred, daughter of Myron and Rosmarie Eldred of Kingsville, is the recipient of a $1,500 Ashtabula County Holstein Club Scholarship. Raeann is a 2016 graduate of Edgewood High School and is currently attending The Ohio State University majoring in Early Childhood Education.

Teresa Polchin, daughter of Shannon Kidwell of Williamsfield and Tony Polchin of Cherry Valley, is also a recipient of a $1,500 Ashtabula County Holstein Club Scholarship. Teresa will graduate from Pymatuning Valley High School this spring and will be attending Youngstown State University majoring in Social Work next fall.

Katie Stokes, daughter of Kenny & Tammy Stokes of New Lyme, is the recipient of the $1,000 Lester C. Marrison Memorial Scholarship. Katie is a 2017 graduate of Pymatuning Valley High School and is currently attending The Ohio State University majoring in AgriScience Education.

Allison Magyar, daughter of Jeff and Mary Magyar of Wayne, is the recipient of a $1,000 Service-Jerome Scholarship. Allison will graduate from Pymatuning Valley High School this spring and will be attending The Ohio State University next fall majoring in Animal Science.

Brooke Poyer, daughter of Bill and Jamie Poyer of Rome, is the recipient of a $500 Service-Jerome Scholarship. Brooke will graduate from Grand Valley High School this spring and will be attending The Ohio State University-ATI next fall majoring in Environment and Natural Resource Management.
Analese Marrison, daughter of David Marrison of Jefferson, is a recipient of a $1,000 Centerra Co-op Scholarship. Analese will graduate from Jefferson High School this spring and will be attending Ohio University next fall majoring in Pre-Occupational Therapy.

Deanna Comp, daughter of Jerry and Linda Comp of Jefferson, is also a recipient of a $1,000 Centerra Co-op Scholarship. Deanna is 2015 graduate of Jefferson High School and is currently attending Kent State University majoring in nursing.

Nicole Mann, daughter of Sharon Millard and Tim Mann of Pierpont, is a recipient of the $1,000 Allan C. Jerome Scholarship. Nicole is a 2015 graduate of Pymatuning Valley High School and is currently attending The Ohio State University majoring in Early Childhood Education.

David Riley, son of Ron and Wendy Riley of Williamsfield, is a recipient of the $1,000 Prochko Family Memorial Scholarship. David will graduate from Pymatuning Valley High School this spring and will be attending Kent State University majoring in Biology and Pre-Veterinary Medicine next fall.

Calla Mazzaro, daughter of Tom and Charity Mazzaro of Williamsfield, is the recipient of the $1,000 Harold & Dick Springer Memorial Scholarship. Calla is a 2016 graduate of Pymatuning Valley High School this spring and is currently attending The Ohio State University majoring in AgriScience Education.

Tracia Bailey, daughter of Davina and Ron Bailey of Jefferson, is the recipient of the $1,000 Christopher L. Zaebst Memorial Scholarship. Tracia will graduate from Jefferson Area High School this spring and will be attending Kent State University majoring in Nursing next fall.

Kyle Peck, son of Jackie and Jim Peck, is the recipient of the $1,000 Sanborn Family Scholarship. Kyle is a 2017 graduate of Geneva High School and is currently attending Gannon University majoring in Pre-Physical Therapy.

Kayla Lowery, daughter of Dave and Tracy Lowery, is the recipient of the inaugural $1,000 Janice K. Eldred Memorial Scholarship. Kayla will graduate from Geneva High School and ATECH this spring and will be attending Ohio State University ATI next fall majoring in Animal Science.

Sydney Millard, daughter of Lynne and Scott Millard of Pierpont, is the recipient of the $1,000 Ashtabula County Ag Scholarship. Sydney is a 2017 graduate of Pymatuning Valley High School and is currently attending the Ohio State University majoring in Actuarial Science.
Allison Crouch, daughter of Beth and Ken Crouch of Cherry Valley, is the recipient of $1,000 Ashtabula County Ag Scholarship. Allison is a 2015 graduate of Pymatuning Valley High School and is currently attending Wilmington College majoring in Agricultural Education.

Gina Hill, daughter of Theda and Joe Hill of Jefferson, is the recipient of a $1,000 Ashtabula County Ag Scholarship. Gina will graduate from Pymatuning Valley High School this spring and will be attending The Ohio State University next fall majoring in Zoology.

Elizabeth Holden, daughter of Martin and Christina Holden of Ashtabula, is the recipient of the $500 Lautanen Family 4-H Scholarship. Elizabeth will graduate from Edgewood High School this spring and will be attending Kent State University next fall majoring in Nursing.

Ashtabula County, you should be proud of Reann, Teresa, Katie, Allison, Brooke, Analese, Deanna, Nicole, David, Calla, Tracia, Kyle, Kayla, Sydney, Allison, Gina and Elizabeth. They are super individuals and a great reflection of all that is good in Ashtabula County.

To close, I would like to leave you with a quote from Helen Keller who stated, “Character cannot be developed in ease and quiet. Only through experience of trial and suffering can the soul be strengthened, ambition inspired, and success achieved.” Have a good and safe day!

**Upcoming Extension Program Dates**

The following programs have been scheduled for Northeast Ohio farmers. Complete registration flyers can be found at: [http://ashtabula.osu.edu/program-areas/agriculture-and-natural-resources/upcoming-educational-programs-deadlines](http://ashtabula.osu.edu/program-areas/agriculture-and-natural-resources/upcoming-educational-programs-deadlines)

Soil Health Testing Field Day- Wednesday, July 11, 2018
David Marrison
Ashtabula County Extension Office
39 Wall Street
Jefferson, OH 44047
440-576-9008
marrison.2@osu.edu
ashtabula.osu.edu

Lee Beers
Trumbull County Extension Office
520 West Main Street
Cortland, OH 44410
330-638-6783
beers.66@osu.edu
trumbull.osu.edu

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