Hello Coshocton County! The joys of springtime weather….it was 80 degrees two weeks ago, snow this morning, a freeze warning for tonight, and then back in the 70s by next week. By all appearances, it looks like the month of May will be favorable for planters to hit the field. Catch your breath as we will be off and running once the calendar turns to May.

A reminder the Master Gardeners are distributing Victory Garden Seed packets. If you would like one of the packets which contains radish, cucumber, and sunflower seeds, please stop in on Monday, Wednesday, or Friday from 8:00 a.m. to 5:00 p.m. to receive a packet. Thanks to the ODA for selecting us to help distribute these seeds.

Have a great week!

Sincerely,

David L. Marrison
Coshocton County OSU Extension ANR Educator
Get Your Victory Garden Seeds from Master Gardener Volunteers

The Ohio Department of Agriculture (ODA) and OSU Extension Offices are kicking off the second year of the Victory Gardens Program. OSU Extension and the Coshocton County Master Gardener Volunteers have 300 seed samples for the Coshocton County Community. Each packet contains radishes, cucumbers and sunflowers. The Master Gardeners will distributing the seed packets on the following dates and locations:

Clary Gardens
Thursday, April 22 from 1:00 to 3:00 p.m.
Compton House (red house)
588 W Chestnut Street, Coshocton, Ohio 43812

OSU Extension-Coshocton Co. Extension Office
Monday, Wednesday, and Friday
8:00 to 5:00 p.m.
724 South 7th Street, Room 110 in Coshocton, Ohio.

Pasture (Frothy) Bloat-Beware When Grazing Legumes

By: Stephen Boyles, OSU Extension Beef Specialist
Source: https://u.osu.edu/beef/2021/04/21/pasture-frothy-bloat-beware-when-grazing-legumes/#more-10740

Bloat has been described in agricultural writings since A.D. 60. Names for bloat have changed over the years: hooive, hoven, tympany, and blown have appeared in English journals of the 18th and 19th centuries. Bloat occurs when rumen gas production exceeds the rate of gas elimination. The gas accumulates and causes distention of the rumen (left side of cattle). If the situation continues, the inflated rumen interferes with respiration. The problem is worsened by the absorption of carbon dioxide (CO2) from the rumen. Death is normally due to suffocation.

Bloat is often associated with discontinuous grazing, such as the removal of animals from legumes pastures overnight. Pasture bloat may occur when grazing is interrupted by adverse weather, such as storms, or biting flies. Anything that alters normal grazing habits will increase the incidence of bloat. The following are a list of forages and their bloat potential:

Forage species and their potential for causing bloat in cattle:

<table>
<thead>
<tr>
<th>High Potential</th>
<th>Low Potential</th>
<th>Considered Safe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa</td>
<td>Arrowleaf clover</td>
<td>Birdsfoot trefoil</td>
</tr>
<tr>
<td>Sweetclover</td>
<td>Spring wheat</td>
<td>Cicer milkvetch</td>
</tr>
<tr>
<td>Red clover</td>
<td>Oats</td>
<td>Crownvetch</td>
</tr>
<tr>
<td>White clover</td>
<td>Rape</td>
<td>Lespedeza</td>
</tr>
<tr>
<td>Alsike clover</td>
<td>Perennial ryegrass</td>
<td>Fall rye</td>
</tr>
<tr>
<td>Winter wheat</td>
<td></td>
<td>Most grasses</td>
</tr>
</tbody>
</table>

Alfalfa can cause bloat in the spring, summer, and fall. Fall bloat conditions are caused by frequent heavy dew or fall frost. After a killing frost (not to be confused with first frost), alfalfa has a reputation of being bloat-safe. However, as long as the plant remains green, there is potential for bloat. Nitrogen fertilizer and frequent, heavy grazing will reduce the amount of alfalfa in a stand.

Bloat is often classified as being either pasture or feedlot bloat. It is more accurate to identify it as being either free-gas bloat or frothy bloat. Frothy bloat normally occurs in cattle eating legumes or lush grasses as well as in feedlot cattle. Free-gas bloat is less common on pasture or in the feedlot.
In situations of frothy bloat, gas production may not be greatly increased but the gases, mainly CO2 and methane (CH4), are trapped in foam or froth. The foam or froth interferes with the expulsion of gases resulting from normal fermentation in the rumen.

**Preventing Bloat on Pasture**

1. Manage pasture for no more than 50% legumes. (This has little value if selective grazing is possible)
2. Fill cattle on dry roughage or grass pasture before turning out on a legume pasture.
3. Do not initially turn cattle on pasture wet with dew or rain.
4. Once cattle are turned to pasture, don’t remove at the first signs of bloat. Watch them closely and remove only those whose condition continues to worsen if it is a small percentage of the total number.
5. If green chop is being fed, spread the intake over several feedings while the cattle are getting adapted.
6. **Livestock Diet Supplements:**
   * Feed anti-foaming chemicals like poloxalene can prevent pasture bloat for about 12 hours if consumed in adequate amounts. Begin feeding two to five days before turning onto pasture. Poloxalene can be fed as a topdressing, in a grain mix, in liquid supplements, or in molasses blocks. The blocks work best when scattered around the entire field at a density of about one block for every 10 head of cattle. The blocks are not as effective if they are placed only near the water supply. The blocks are more effective in small fields than in large ones. Because poloxalene is relatively expensive, some producers reduce the dosage or eliminate its use after livestock have been grazing pasture for several weeks.
   * Provide supplements or molasses blocks containing bloat-reducing compounds such as an ionophore (example: Rumensin®).

A few recommendations from the past seem unusual today, for example, “feather burnt, and held for some time while in full smoke, close under the nose of the animal” (1795); and “a pint of gin to each animal” (1925). Some of the early suggestion still have merit. For example, placing an animal’s front feet on a mound so that the front feet are higher than the back feet helped to ease bloat because the esophagus was thus elevated and the gas was expelled more easily. Walking was a commonly used treatment for bloat and was effective if used before bloat reached the acute stage. Another method involves placing a stick or rope through an animal’s mouth to encourage salivation, which breaks down rumen foam.

**Treatment:** Free-gas bloat can usually be relieved by inserting a 3/4” rubber hose into the rumen via the esophagus. If “hosing” does not give immediate relief, a defoaming agent (poloxalene) should be administered through the hose to break the surface tension of the ingesta. A pint of mineral oil is also a defoamer. Drenching should be avoided because of the danger of inhalation by the bloated animal which can cause immediate death or lead to pneumonia. Similarly, a hose placed in the rumen will have a gurgling sound and the smell of ammonia, whereas a hose that has passed into the lungs will have the sounds of breathing. Use of a speculum (a steel tube) placed in the mouth will help in passing the hose and prevent the animal from chewing the hose. A trocar should be used as a last resort and veterinarian should be contacted if this is or going to be done. Chronic bloaters should be shipped for slaughter.

**Will Forage Stands Be Damaged by Predicted Freezes?**

By: Mark Sulc

Source: [https://agcrops.osu.edu/newsletter/corn-newsletter/10-2021/will-forage-stands-be-damaged-predicted-freezes](https://agcrops.osu.edu/newsletter/corn-newsletter/10-2021/will-forage-stands-be-damaged-predicted-freezes)

The weather forecast this week is indeed concerning for forage stands in general and especially for alfalfa and red clover. The low night temperatures in the forecast may potentially cause severe frost injury to both annual forage crops (e.g. winter rye and winter triticale) and perennials forages.
Growers should scout and evaluate their forage stands several days after the cold nights because predicting freeze damage is difficult to impossible. Freeze damage and plant recovery from it are influenced by many factors, including the absolute minimum low air temperature, soil temperature during the freeze event that can moderate near-surface air temperatures in the canopy, field topography, snow cover during cold nights (that provides insulation), age and stage of plant growth, and stand health and vigor as influenced by soil fertility and prior cutting management.

The overall vigor of the stand will determine the tolerance to freezing and recovery from freeze injury. Vigorous stands that were not cut in the fall and with good soil pH and fertility will tolerate and recovery from freezing the best.

**What to look for in established stands:** Damage will initially appear as a wilting of the forage legume leaves and stems, with the top of stems bending over into a “shepherd’s hook” appearance (see Figure 1). This can usually be seen within 24 hours in legumes. This initial wilting might be a little harder to see in perennial grasses. This wilting damage is either temporary if the freeze damage is not too severe, or it is the initial symptom of more severe damage that will appear in the next several days.

Several days after a severe freeze event, leaf and stem death will become obvious, as seen in Figure 2. The shoots and their growing points might be completely killed, but it is rare that the entire crown is killed unless the stand vigor is very poor.

Several days to a week after the freeze event(s) evaluate established stands to determine the damage.

If a third or less of the tops are damaged, do nothing as the remaining undamaged stems will provide enough growth and yield. There may be some yield reduction, depending on the stand vigor and health. There will likely be some delay in growth resulting in a later first cutting which will help the stand recover more fully.

If most, but not all, of the stem tops are damaged and the stand is less than 10 inches tall, it should recover in time. New existing buds in the axils of leaves in the lower canopy will grow and new crown buds might be initiated and grow as well. Mowing existing top growth will not improve the recovery.

If most of the stem tops are damaged and the stand is more than 12 inches tall, harvest the forage and allow it to regrow.

If all stems are frozen back with severe plant necrosis, the plant is probably dead. If a large portion of the plants in the field exhibit these symptoms, it would be best to plant an emergency forage or interseed the stand with an
annual grass forage crop. This scenario is most likely for stands that were abused, older, were not healthy and vigorous, were cut in the fall, or have inadequate soil pH and fertility.

What to look for in new seedings: New seedings made this spring might survive a cold night better than you might think due to the seedlings being close to the warmer soil surface. Seedlings are more freeze tolerant in the cotyledon to first or second trifoliate leaf stage than at later growth stages. Most new seedings planted in the last few weeks are in these very early stages of development.

If death of the cotyledons and all leaves occurs, the seedlings are probably dead and will not regrow. A good indicator of survival potential is if at least one set of leaves survives the freeze. A companion crop like oat planted with the forage seeding will help protect the newly emerged perennial seedlings.

In summary: Be prepared to assess your forage stand, especially new legume stands, in the days and week following our cold nights that are forecast for later this week. Reach out to your county extension educator with any questions and observations you have about your forage stands. We will be assessing any damage across the state and will follow up with articles in this newsletter in the coming weeks if necessary.

How Will Your Farm Emerge from the Coronavirus Pandemic
Chris Zoller, David Marrison & Mike Estadt, OSU Extension
Source: https://u.osu.edu/ohioagmanager/2021/04/14/how-will-your-farm-emerge-from-the-coronavirus-pandemic/

It has been more than a year since Coronavirus was declared a pandemic. Everyone has been touched by the pandemic either directly or indirectly. As an industry, Agriculture has experienced market disruptions and slowdowns in the processing sector due to the pandemic. In response, the United States government provided billions of dollars in economic relief in 2020 to assist farmers affected by the disruptions. This assistance has continued into 2021 as just recently the United States Department of Agriculture (USDA) announced details about the “Pandemic Assistance for Producers” Initiative.1 This article takes a look at federal farm support, forecasts for net farm income in 2021, and challenges farm managers to examine how their business will emerge from the coronavirus pandemic.

US Governmental Farm Support
The following figure from the University of Illinois2 (Figure 3) shares the government farm support programs for the past fifteen years with a forecast for 2021. Farm program payments have been cyclical and have ranged from a low of approximately $10 billion in 2014 to a high of nearly $45 billion in 2020. The forecast for government payments in 2021 is around $25 billion.

Farm Income Forecast
The USDA’s Economic Research Service (ERS) 2021 Farm Income Forecast3 projects U.S. net farm income (NFI) to decrease $9.8 billion (8.1%) to $111.4 billion in 2021. When indexed for inflation, net farm income is anticipated to decrease by $12 billion or 9.7%. Net farm income is a broad measure of farm sector profitability that incorporates noncash items, including changes in inventories, economic depreciation, and gross credited rental income. Despite the decline, NFI in 2021 is still expected to be 21 percent higher than the twenty-year average. ERS predicts U.S. net cash farm income to decrease $10.4 billion (7.5 percent) to $128.3 billion in 2021. Net cash farm income is defined as cash receipts minus cash expenses and does not include changes in...
inventories or depreciation.

Underlying these forecasts, cash receipts for farm commodities are projected to rise $20.4 billion (5.5%) in 2021. Total animal receipts are expected to increase by $8.6 billion (5.2%) and total crop receipts are forecasted to increase by $11.8 billion (5.8%). Direct government payments to farmers are expected to be 45.3% lower - a $21 billion decrease from 2020. This decline is largely caused by lower anticipated payments from supplemental and ad hoc disaster assistance for COVID-19 relief. Total production expenses are forecasted to increase $8.6 billion (2.5%).

**Implications**

As the pandemic subsides, it is almost certain that U.S. government farm support payments in 2021 and future years will be significantly lower. The financial bottom line for many farm operations was positive in 2020 due to historically high ad-hoc payments. Looking forward to 2021 there is much optimism in the crop sector due to the recent surge in crop prices and lower stock reports. However, much can happen between now and next fall’s harvest. It is anticipated that livestock and dairy producers will feel the effects of high grain prices when purchasing feed.

**Post-Pandemic Planning**

As we analyze the crazy pandemic year of 2020 and its lingering impacts into this new year, we have been asked how successful farm businesses should plan as the pandemic subsides and life returns to “more normal.”

First, sound business practices and structure are the foundation for business to fall back on when facing internal and external disruptions. Take time to develop or review your farm’s written Mission Statement, a brief statement that explains why you are in business. Involve family and employees in the discussion. It is also recommended to develop written goals – both short-term and long-term. You are more likely to achieve goals that are WRITTEN and shared with others. Post pandemic is also a great time to conduct a SWOT Analysis – to review the Strengths, Weaknesses, Opportunities, and Threats related to your business. OSU Extension has some great resources to help you in analyzing the foundation of your business. Check out these resources at:

- Whole Farm Planning Model: [https://ohioline.osu.edu/factsheet/anr-52](https://ohioline.osu.edu/factsheet/anr-52)
- Developing Goals for the Agricultural Business: [https://ohioline.osu.edu/factsheet/anr-45](https://ohioline.osu.edu/factsheet/anr-45)
- Conducting a SWOT Analysis of Your Agricultural Business: [https://ohioline.osu.edu/factsheet/anr-42](https://ohioline.osu.edu/factsheet/anr-42)

Secondly, we also offer the following suggestions for you to consider as we move forward from the rollercoaster for 2020 and the early part of 2021:

1. Do not rely on government farm programs as income sources as you develop enterprise budgets specific to your operation. Check out OSU budgets at: [https://farmoffice.osu.edu/farm-mgt-tools/farm-budgets](https://farmoffice.osu.edu/farm-mgt-tools/farm-budgets)
2. Work toward being a low-cost producer by knowing your cost of production. Higher crop prices can be a temptation not to be detailed in tracking expenses. Make sure to track and monitor both variable and fixed expenses.
3. Develop contingency plans and emergency preparedness plans for overcoming disruptions which impact your business. How will work get done if employees get sick or are in quarantine? How will you
overcome future slow-downs in the processing sector or if crops cannot be shipped to market?

4. Enroll in the Ohio Farm Business Planning and Analysis Program to fully understand your farm operations financial strengths and weaknesses. Learn more here: https://farmprofitability.osu.edu/

5. Review leases and contracts annually.

6. Hold family meetings – to discuss finances, review your mission statement, complete a SWOT analysis, and develop goals. See this OSU Extension Fact Sheet: https://ohioline.osu.edu/factsheet/anr-43

7. Network with your peers. Share successes and challenges.

8. Form and meet with a farm business advisory team that may include one or more of the following: Extension Educator, accountant, lender, nutritionist, crop advisor, insurance agent, and others important to your business. See this OSU Extension factsheet: https://ohioline.osu.edu/factsheet/anr-43


Summary
The coronavirus pandemic has revealed that agriculture is a resilient industry. Crops were still planted and harvested; livestock continued to be cared for. Despite some infrastructure issues related to food processing, Americans were still able to access safe and affordable food. The pandemic has revealed how dependent the agricultural supply chain is on timely delivery of goods and services, healthy and available agricultural workers, and a confident consumer willing to adapt and adopt new buying practices.

As Americans begin to exit the last throes of the pandemic’s lockdowns, return to work and school, and begin life anew, reflection on emergency preparedness should be re-evaluated and adjusted plans put in place. Each farm business should continue to put contingency plans in place for the next disruption. And, make sure you keep an adequate supply of toilet paper on hand, just in case!

References


Club Lamb Fungus- Ringworm
By: Duane Miksch, Food Animal Extension Veterinarian, University of Kentucky
(Previously published online as Vet 30, Agriculture Veterinary Publications)
Source: https://u.osu.edu/sheep/2021/04/20/club-lamb-fungus-ringworm/

Club Lamb Fungus Disease is of increasing concern in exhibited sheep. It is highly contagious in fitted sheep, and also is easily transmitted to people who groom and care for sheep.

Club Lamb Fungus Disease is an atypical moist ringworm of sheep. It has sometimes been referred to as lumpy wool, which is a misnomer, because lumpy wool is a skin disease caused by a species of filamentous bacteria that also causes strawberry footrot. Lumpy wool occurs frequently in Africa, Europe, and Australia, but not in North America.

A better understanding of Club Lamb Fungus Disease and the conditions that favor its spread will help you keep your sheep and yourself free of this serious fungal skin disease.
**Cause of the Disease**
The club lamb fungus, Trichophyton verrucosum, is apparently a variant of T. verrucosum, the fungus that causes ringworm of cattle. Ringworm fungi are referred to as dermatophytes (plants that grow and produce lesions on animal skin). They are unique fungi for two reasons: they cause contagious infections and they require keratin as a nutrient source. Keratin is the principal protein of the skin surface, and of hair and wool. The diseases caused by dermatophytes are generally referred to as ringworm (from the circular nature of the lesion) or tinea (from the Latin word for the clothes moth, whose feeding habits result in circular holes in woolen cloth).

**Nature of the Disease**
Trichophyton verrucosum enters the skin through abrasions or other disruptions of cells in the surface layer. The fungal spore germinates and fungal filaments invade the walls of hair or wool follicles. They then grow downward between the shaft of hair (or wool) and the wall of the follicle. As the hair or wool grows, the fungal elements are carried out of the follicle and above the skin surface. Many of these hairs fall out or are broken off.

The fungal invasion spreads outward in a circular pattern, resulting in a ring-shaped lesion. The greatest inflammatory response is at the outer edge of the circle. The fungus does not invade living skin, but its presence in the dead layers provokes an active inflammation of the underlying living layers. This provides a favorable environment for invasion of living tissues by secondary bacterial infections.

There are usually a number of separate lesions. Except initially, there is rarely a solitary lesion, and generalized body involvement is also rare. Individual lesions vary considerably in size. The progress of the disease involves matting of wool, followed by loss of wool, scaling, and crusting. Early lesions may not be readily seen, but the thickened nodules can be felt. There is usually little evidence of itching. However, infected sheep will rub along fences and feed bunks, contaminating the structures with fungal spores.

**Spread of the Disease**
Dermatophyte infections are seen mostly in young animals with immature immune systems that are kept in close contact. High humidity, high environmental temperature, and insults to the skin are common predisposing factors. Abrasions from clippers, brushes, and other grooming activities are therefore important influences in the occurrence and spread.

Transmission of ringworm is usually from animal to animal by direct contact or indirectly through people’s hands, grooming tools, blankets, walls, fences, or feed bunks. Club lambs are especially susceptible to ringworm because they are frequently subjected to washing and clipping. Lanolin, the natural oil of the wool, may be a defense to invasion by the fungus; much of it is removed in washing. Close clipping tends to abrade the skin and aid in spreading the disease.

Lesions appear in 1 to 6 weeks (typically about 2 weeks) after the animal comes in contact with the fungus. The fungus will grow and spread over the skin for the next 2 to 8 weeks. After 4 to 12 weeks the lamb’s immune system will respond sufficiently to clear up the infection. The recovered lamb will be resistant to reinfection, usually immune for life.

While the fungus is active the infected lamb will rub on posts, gates, feed bunks, and walls. The fungal spores deposited on these objects may remain infective, keeping the premises contaminated if untreated. Lambs chewing on boards may provide moisture needed to nurture the fungus and allow it to live in pens for prolonged periods.

Spores that contaminate buildings may be the most important means by which the infection is maintained from one season to the next. The spores will survive freezing but are killed by drying and by heating to 125° F. The club lamb fungus is readily transmitted to people who groom or care for sheep. The lesions in people are reported to be more severe than those caused by ringworm of cattle.
Here are a few tips for prevention:

- Wear gloves when handling infected sheep, or using contaminated equipment, or working in a contaminated environment, as they offer a measure of protection.
- Wash your hands, arms, and other exposed body areas with an iodine soap or a 10% chlorine bleach solution (1 part bleach to 9 parts water); this may help prevent infection.
- Avoid direct contact with lesions when handling infected sheep.

If you or a member of your family contracts Club Lamb Fungus Disease, be sure to tell your physician that the fungus is different from other ringworm and may not respond well to traditional treatment.

Treatment

There is no FDA-approved treatment for fungal infections of sheep. Therefore, any treatment must be under the supervision of a veterinarian who has examined the sheep, made a diagnosis, and prescribed the treatment. Over-treating with irritant preparations can result in crusty, weeping skin lesions that are not unlike Club Lamb Fungus Disease.

Research suggests that most treatments have little effect on individual lesions. Most reported cures are probably due to treatment administered just prior to spontaneous recovery. However, an advantage of treatment is that it greatly reduces contamination of the environment by infected animals.

For surface applied treatment, the crusts should be removed by scraping or brushing with a soft wire brush. The medicament should be brushed or rubbed in vigorously. Take care to remove and burn the scrapings.

Prevention and Control

- Immediately isolate animals with active lesions.
- Provide separate grooming equipment and feeding utensils.
- Clean and disinfect all items before using with other animals.
- Clean and disinfect contaminated pens and stables.

Use a commercial detergent and a 2.5-5% solution of a phenolic disinfectant, 2% cresol, 5% formaldehyde or a 2-5% solution of sodium hypochlorite (equal parts of bleach and water or full strength bleach). Bleach should not be used on clippers and other metal objects since it will cause them to rust. Nolvasan® solutions can be used to sanitize clippers and other equipment without rusting the metal.

Recommendations and Rules for Fairs & Shows

1. Do not bring infected sheep to fairs or shows. Active fungal lesions will render health papers null and void. Also, do not bring recently treated sheep to fairs or shows. They are a serious source of infection to other animals.
2. Do not loan or borrow grooming equipment or feeding utensils.
3. If you think your sheep may have been exposed to the club lamb fungus, a mild solution of chlorine bleach (1 part bleach to 9 parts water) may be used as a body rinse when you return home (if bleach contacts metal equipment it will cause rust).
4. Sheep for exhibit must be penned and equipment moved in only during specified hours. This allows show officials to maintain surveillance for infected sheep. All sheep will be processed through designated doors at specified times.
5. At the Kentucky State Fair and other major shows each sheep will be individually inspected by a representative of the State Veterinarian. Animals suspected of having ringworm will have skin scrapings and wool collected for microscopic examination to determine if fungus is present. Suspect animals must be isolated by the exhibitor until test results are available.
6. Animals testing positive for ringworm must be removed from the fairgrounds or placed in a common quarantine area until the show is completed. Positive animals cannot be penned individually during the show. Surveillance at county and district shows will be as strict as available resources will allow.

Summary
Club Lamb Fungus Disease can be controlled and its spread prevented, if all concerned work together. Here’s what you can do:

- Make your lambs less susceptible by washing them less frequently, using mild soap in order not to remove the lanolin, and clipping less closely and more carefully.
- Don’t show infected sheep.
- Don’t loan or borrow equipment.
- To protect your flock, keep newly purchased sheep, and sheep you have shown, in quarantine at home for up to 6 weeks.

**Ag Extension Talk**

By: David L Marrison, Extension Educator, Agriculture & Natural Resources
For Publication on April 22, 2021- The Beacon

Hello Coshocton County! Thus far, the month of April has been a really nice month. The 80-degree temperatures from two weeks ago made the landscape explode with the sights and smells of spring. I have enjoyed watching our landscape pop with the brilliant colors from the tulips we planted last fall, watching our young group of goats frolicking across the pasture, smelling fresh cut grass, and the soil being turned by area farmers. Spring is alive and well in Coshocton County!

As we enjoy the beginning of spring, I would like to share a few home gardening tips and provide details about the purple haze being seen in fields across the county.

**Soil Testing** - OSU Extension recommends you soil test your garden, lawn, or crop fields every three to five years. The major reason to soil test is so that you will know what the pH of the soil is. Our soils tend to be acidic which means that you may need to add lime occasionally. The only way to know how much to add is to measure the pH, or as our Master Gardener Volunteers say, “Don’t guess - soil test!” Additionally, the soil test will give phosphorus and potassium levels and provide a recommendation for nitrogen. These are the three major nutrients which all plants need. Each soil test summary will provide you with a prescription of what fertilizer is needed. Soil test kits can be purchased at the Coshocton County Extension Office for $16 per test. Stop in today and get your soil test kit.

**Mulching** - As it begins to warm up, you may have the urge to start on yard work like mulching. But it is best to wait. Mulching too early keeps the soil wet and cold which could damage the root systems of plants. Also beware that heaping mounds of mulch against tree trunks, often referred to as volcano mulching, can be damaging. Moisture captured by the mulch can keep the plant's bark in a continued state of wetness. This can cause the bark to decay, and lead to insects, fungi, and bacteria feeding on the damaged tissue. Not a good thing!

Mulch put on at the proper time and at the proper depth of 2-3 inches, can have many benefits including the prevention of weed growth, conservation of moisture in the soil, stabilization of soil temperatures, and the addition of organic matter to the soil. My general guideline is that mulch should never be applied before Mother’s Day. Patience is a virtue.

**Lawn** - Lawnmowers have been in full gear and last week I was asked if keeping my lawn taller is better for its overall health. The answer is an emphatic yes! For a typical residential lawn, it is recommended to maintain a grass height of 3 inches or higher. So, if your lawn looks like something that you could putt a golf ball on, then it is most likely too short. Taller grass shades out weed seeds and keeps the soil cooler. Taller grass also means longer roots giving the lawn a greater ability to withstand drought or flooding and allows them to reach soil nutrients better.

As you mow, it is recommended to remove no more than 1/3 of the leaf tissue. So, to maintain a 3-inch lawn, mow the grass before it reaches 4 1/2 inches tall. When we hit the dog days of summer, it is recommended to increase the mowing height by an inch to help improve the lawn’s ability to tolerate stress caused by heat and drying winds. Mowing too short or scalping results in stress to the grass plant and weak grass plants will take...
longer to recover. Mowing too short also allows weed seeds to get more sun and then out compete the grass. One weed that loves when you mow too short is crabgrass. So, before you mow this weekend, grab a ruler and see how you are doing.

What is that purple flower I see in so many of our crop fields? The beautiful purple haze of color we have been seeing over the past few weeks in area crop fields is a winter annual weed by the name of purple deadnettle. It is one of our spring’s earliest arriving weeds. Purple deadnettle is in the mint family and its leaves are opposite, triangular to heart shaped with a serrated leaf margin. These leaves are purple to red in color. The flowers are light purple.

One really cool feature of the plant is that it has a distinct four-sided stem which is common to plants in the mint family. Although purple deadnettle is considered a weed it is utilized as a food source by pollinators in early spring. The nectar of purple deadnettle is attractive to bumble bees, honey bees, and digger bees. The purple haze of our fields will disappear as our farmers begin their spring tillage. But never fear, purple deadnettle is a heavy re-seeder and will be back next spring!

To close, I would like to share a quote by Frank Howard Clark who stated, “Criticism, like rain, should be gentle enough to nourish a man's growth without destroying his roots.” Have a good and safe day.

“Spring will come, and so will happiness. Hold on. Life with get warmer.”