Happy Earth Day Coshocton County! We were down to a chilly 26 degrees this morning and we may see another chance of frost late Sunday evening. Our landscapes are starting to wake up. Lots of purple deadnettle is crop fields and I see a lot of garlic mustard along our roadsides. In honor of Earth Day, if you see any garlic mustard, pull it up.

As COVID-19 continues, OSU Extension will provide updates on the government’s response to help agriculture. In today’s newsletter, you will see an article I co-authored on Coronavirus Food Assistance Program (CFAP) which was released late Friday evening. We will keep our eyes on the mechanics of the direct payments with our local Farm Service Agency office and keep providing updates.

Looks like May is bringing better weather. Let’s hope it also brings more relief from COVID-19! Stay well and remember, while our office is closed to the public I can still be reached directly at 740-722-6073 or via email at marrison.2@osu.edu. Stay safe!

Sincerely,

David Marrison

Coshocton County OSU Extension ANR Educator

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**Update on the Impact of COVID-19 on Ag Markets**

By David Marrison, Coshocton County Extension Educator, ANR

Source: Ben Brown, Presentation on Farm Office Live on April 20, 2020

On a Farm Office Live webinar offered by OSU Extension on Monday, April 20, Ben Brown (Assistant Professor of Professional Practice- Agricultural Risk Management for OSU’s Department of Agricultural, Environmental, and Development Economics) addressed the impact that COVID-19 has had thus far on agriculture through the lens of the Future Prices for Agricultural Commodities since January 2, 2020. The first confirmed case of Coronavirus in the United States was on January 21, 2020 in the State of Washington.

Brown shared the following graph to show the changes to agricultural products. The biggest drop in future prices have been in hogs down 38% followed by feeder cattle down 33%. The dairy industry has also been hit as the Class IV futures price is down 32% and the Class III prices down 28%. Ethanol is down 36%.

Traditional row crops have seen the smallest decline in future’s prices with corn prices down 18% followed by soybeans at 12% and wheat at 4%.

Farm Management experts from Ohio State will continue to monitor the impact of COVID-19 and will be sharing information on a weekly Farm Office webinar on Monday’s from 8:00 to 9:30 p.m. More details can be obtained about these updates at: [https://farmoffice.osu.edu/farmofficelive](https://farmoffice.osu.edu/farmofficelive)

**USDA Announces Coronavirus Food Assistance Program (CFAP)**

By: Ben Brown Assistant Professor of Professional Practice- Agricultural Risk Management, Department of Agricultural, Environmental, and Development Economics & David Marrison, Associate Professor & Extension Educator in Coshocton County

On April 17, the preliminary details about the Coronavirus Food Assistance Program (CFAP) were released by the U.S. Department of Agriculture (USDA) program aimed to assist farmers, ranchers, and consumers in response to the COVID-19 pandemic. The CFAP provides $19 billion in funds authorized through the Coronavirus Aid, Relief, and Economic Security Act (CARES).

The $19 billion program includes two major elements. The first element is for Direct Support to Farmers and Ranchers. This program will provide $16 billion in direct support to farmers based on actual losses where prices and market supply chains have been impacted by COVID-19. The program will also assist producers with additional adjustment and marketing costs resulting from lost demand and short-term oversupply for the 2020 marketing year caused by COVID-19.
It has been reported, although not confirmed by the USDA, that in the direct support program, $5.1 billion will be allocated to support cattle producers, $3.9 billion for row crop producers, $2.9 billion for dairy, $2.1 for specialty crops, $1.6 billion for hog producers and $500 million for other commodities.

The Chairman of the Senate Agricultural Appropriations sub-committee has indicated the direct assistance to producers will be one payment comprised of the sum of two parts. The first part is 85% of the losses incurred between January 1 and April 15, 2020 per commodity. The second part will be 30% of the loss in market prices due to COVID-19 between April and the next two quarters. Secretary Perdue has expressed that payments are intended to be made by end of May or early June.

To qualify for a payment, a commodity must have declined in price by at least 5% between January and April 15, 2020. While there are several entities illustrating price declines including The Ohio State University, the price series USDA will use to determine eligibility is uncertain. Federal payment limits apply, set at $125,000 per commodity with an overall limit of $250,000 per individual or entity. USDA has indicated that CFAP may take into consideration other farm program benefits regarding payment limitations, which could limit CFAP payments in the case a producer is receiving payments in other federal safety net programs. The exact program limitations and qualifying support are unknown at the present time. The direct payment program will be administered by the Farm Service Agency. More details will be forthcoming by the Farm Service Agency in the upcoming weeks. Access more information at: https://www.fsa.usda.gov/

The remaining $3 billion dollars of the CFAP allocation will be used for a USDA Purchase and Distribution program. In this program, the USDA will partner with regional and local distributors to purchase $3 billion in fresh produce, dairy, and meat. The USDA will purchase an estimated $100 million per month in fresh fruits and vegetables, $100 million per month in a variety of dairy products, and $100 million per month in meat products. The distributors and wholesalers will then provide a pre-approved box of fresh produce, dairy, and meat products to food banks, community and faith-based organizations, and other non-profits to distribute. Monthly purchases totaling $300 million will continue until the funds are exhausted.

In addition to the Coronavirus Food Assistance Program, the USDA will utilize other available funding sources to purchase and distribute food to those in need. This includes an additional $873.3 million available in Section 32 funding to purchase a variety of agricultural products for distribution to food banks. The use of these funds will be determined by industry requests, USDA agricultural market analysis, and food bank needs.

Additionally, the FFCRA and CARES Act provided at least $850 million for food bank administrative costs and USDA food purchases, of which a minimum of $600 million will be designated for food purchases. The use of these funds will be determined by food bank need and product availability.

For all the information on USDA’s work during the COVID-19 pandemic and resources available, visit https://www.usda.gov/coronavirus.
The cold pattern that was expected last week dropped soil temperatures and put a hold on most activities. Improvement will occur but it will be slow for the rest of April. A progressive west to northwest airflow will keep weak or weak/moderate systems passing through Ohio about every 2 days over the next week with generally light or light to moderate precipitation. The flow pattern supports temperatures remaining at or below normal for the rest of April but not as cold as last week. Precipitation is expected to be close to normal. Warmer weather is expected as the calendar turns to early May with above normal temperatures expected which is some good news.

TEMPERATURES
Temperatures will moderate for the rest of April with highs mostly in the 50s and 60s though northern Ohio may only see highs in the 40s Tuesday of this week. Low temperatures will be in the mid 30s to the 40s for the most part. For the rest of April temperatures will average about 5 degrees below normal. May temperatures will likely be near normal or slightly above normal but the start of May looks to be above normal temperatures by several degrees.

PRECIPITATION
Excessive rain is not expected the next 2+ weeks but frequent lighter rain is. Rainfall will average 1-3 inches the next two weeks with normal being 1.75 to 2 inches. Therefore, rainfall is considered near normal overall. A few wet snowflakes can not be ruled out Tuesday of this week in the northeast corner of Ohio. May is expected to see rainfall normal to slightly above normal. The blocking pattern over Alaska and northern Canada in 2019 which drove the active storm track from Japan to the Ohio Valley does not look to occur in 2020. This will result in fewer overall moderate to strong storm systems into May and June of 2020. The pattern is still active but just not as active as 2019.

FROST/FREEZE
We do see another freeze this Wednesday AM with lows in the mid 20s to lower 30s. Some additional frost and near freeze conditions can also be expected this upcoming Sunday into Monday mornings. Overall, the frost and freeze conditions going forward are considered pretty close to typical for Ohio in late April and early May. After this Wednesday the chances of hard freeze conditions begin to decrease.

SOIL TEMPERATURES
Soil temperatures dropped below 50 in most areas last week and will slowly work back toward that level for the rest of April though it may not reach that level in parts of the north and northeast section of the state.

SUMMER GROWING SEASON
There is uncertainty in the summer outlook but currently above normal temperatures are favored with rainfall going from above normal to start to normal or drier than normal in the later portions of summer.

The latest NOAA climate information can be found at: https://www.cpc.ncep.noaa.gov
The latest river and soil information can be found at: https://www.weather.gov/ohrfc/
The latest Water Resources Outlooks can be found at: https://www.weather.gov/ohrfc/WRO
Managing Stored Grain into Summer
By: Jason Hartschuh & Elizabeth Hawkins
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2020-10/cool-weather-hang-rest-april

If you are storing more grain on farm this spring than usual, you are not alone. Over the last few weeks, we have heard from more producers who are considering holding grain longer into summer months than they normal would. We have also heard a few reports of spoiled grain as producers fill April contracts. Carrying graining into summer has been done for many years successfully but requires much more intensive management than winter grain storage.

Key advice for long term grain storage
1. If bins were not cored in early winter core bins now
2. Verify the moisture content of stored grain is at or below recommended levels
3. Monitor grain temperature every 3 or 4 weeks throughout storage paying special attention to insect activity and mold
4. Monitor the roof area for signs of condensation
5. Cover fans to keep the chimney effect from warming the grain
6. Provide roof ventilation at two levels above the surface of the grain, one vent should be close to the peak of the bin
7. Aerate bins on cool mornings every couple weeks as grain at the top of the bin becomes warm

The first management consideration is the moisture of your stored grain. If you plan to store grain into the warmer summer months, it is important to know the moisture content of your stored grain. Last fall some grain went into storage at a higher than ideal moisture content. If crop development was impacted by the unusual weather conditions in 2019, moisture tester readings can be off by up to 2 points. The recommended maximum storage moisture content for summer are shown below.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Maximum summer storage moisture %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>13-14%</td>
</tr>
<tr>
<td>Soybean</td>
<td>11%</td>
</tr>
<tr>
<td>Wheat</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

If your stored grain is currently at a higher moisture content, you should consider moving it to market or drying to these recommended storage moistures using natural drying, if possible. Using high temperature drying now is not recommended because recooling the grain for summer storage will be challenging.

The second consideration for maintaining stored grain into the summer is temperature. Historically, it was recommended to warm grain in the summer as ambient air temperatures increase, but this is no longer considered a best management practice. It is now recommended to keep grain as cool as possible for spring and summer grain storage. Warming grain to average outdoor summer temperatures can lead to increased potential for insect infestation and mold growth. Keeping grain temperature below 70°F lessens insect reproductive activity compared to 80°F but keeping this temperature below 60°F will greatly reduce insect activity. When grain temperatures are below 50°F, most insects are dormant.

Monitoring stored grain temperature through the summer will allow you catch potential problems. Grain is an excellent insulator, so it can be challenging to detect pockets of warm grain. If summer grain storage will be common on your farm, using multiple temperature monitoring cables throughout the bin is recommended. Since the grain at the top of the bin is often the warmest, a two foot thermometer can be used to check temperatures if monitoring cables are not installed. Grain temperature should be checked every couple weeks
in the center and around the edges of the bin. Often the south side of the bin warms up before other sections. Increased temperature maybe a sign of mold growth or insect activity.

Proper ventilation is also important when keeping grain in summer months. Solar radiation warms the roof of the bin and the air below. Natural convection air currents within the bin cause air to rise along the walls and be drawn into the center of the bin, warming the grain. Natural ventilation of the air space above the grain can be used to help keep this space cool. Having vents in two areas above the grain with either a vent or fan at the peak assists with this ventilation. This works similar to attic vents in a home. Air enters at the bin eave openings and leaves at the peak vent helping to keep the area above the grain cool.

The bottom positive pressure ventilation fans can also be used to help keep the grain at the top of the bin cool. Running fans every three or four weeks on a cool morning for a couple days in a row can cool the grain at the top of the bin. The air entering the bottom of the bin is cooled by the cold grain and then cools the grain at the top. It is very important to select mornings when air is cool and dry. While we often do not cover bottom ventilation fans during winter grain storage this is much more important for summer storage. Openings at the bottom of the bin create a chimney effect throughout the entire grain mass. Warm air enters the bottom of the bin and as wind blows past the top of the bin the air is drawn up through the grain mass warming it up. Fan covers can be as simple as a tarp fastened over the fan or there are more durable fan covers available.

Keeping stored grain in condition during summer months will take more management than winter storage and the risk of spoilage is higher. Remember that stored grain cannot be kept in condition indefinitely. We strongly recommend you have a grain marketing plan for any grain you are keeping in storage.

**How Cold is too Cold for Winter Wheat?**
By: Laura Lindsey, Alexander Lindsey & Aaron Wilson
Source: [https://agcrops.osu.edu/newsletter/corn-newsletter/2020-10/how-cold-too-cold-winter-wheat](https://agcrops.osu.edu/newsletter/corn-newsletter/2020-10/how-cold-too-cold-winter-wheat)

Overnight temperatures on April 15 and April 16, 2020 dropped into the low to mid 20s across a large portion of Ohio (Figure 1), and unofficial reports show a few locations briefly dropped into the upper teens! These temperatures were generally 12-20°F below average (1981-2010). A closer investigation at a few of the colder sites reveal temperatures remained below 32°F for 9-11 hours, below 28°F (hard freeze) for 7-9 hours, and below 22°F for 3-5 hours.

Injury to winter wheat depends primarily on three factors: 1) growth stage, 2) how cold, and 3) duration of cold temperature. Differences in freeze injury among cultivars can usually be attributed to slight differences in growth stage.

Although temperatures were low and there may be some yellowing/browning of leaves, the impact on wheat grain yield is likely to be minimal. In our research, at Feekes 6 growth stage, reductions in wheat grain yield began when temperatures fell to less than 20°F for a 15-minute duration. A 50% reduction in grain yield occurred at 12°F for a 15-minute duration.

Prior to Feekes 6 growth stage, the growing point of wheat is below the soil surface, protected from cold temperatures. However, at Feekes 6 growth stage, the first node appears and pushes the growing point
(developing spike) up through the plant stem, and this developing spike can be damaged by low temperatures.

Damaged spikes can be observed by carefully cutting the wheat stem lengthwise to expose the developing spike at the first node. Damaged spikes will appear discolored and shriveled, which occurred at the 3°F temperature treatment (Figure 2).

At Feekes 6 growth stage, damage from low temperatures will cause yellow or browning (necrosis) of the leaf tissue, most likely leaf tips or edges exhibiting symptoms first (Figure 3). Death of leaf tissues and stems may result in the formation of tertiary (regenerative) tillers from surviving plant crowns (Figure 4). These tertiary tillers may produce seed, but often time do not fully mature, resulting in small, lightweight kernels. Overall, grain yield is reduced in these situations as primary and secondary tillers account for the majority of grain yield.

Meat vs COVID-19; The Good, the Bad and the Ugly of Supply and Demand
By: Stan Smith, OSU Extension, Fairfield County

To suggest that supply in local meat cases has been disrupted since schools closed and ‘stay-at-home’ orders were issued last month might be an understatement. The good is simply this. We have more than adequate supplies of market ready livestock on the farm to accommodate the consumer’s demand for meat. The bad is that COVID-19 caused disruption to the meat supply chain that created short term shortages in the meat case, and fluctuations of price in both the meat case and especially livestock at the farm. The ugly is these concerns are likely to affect both the farmer and the consumer for weeks, and perhaps even months to come. The solution to the chain of events that have caused the problems in the supply chain all revolve around how quickly COVID-19 is arrested and the lives of consumers and all the members of the meat supply chain can return to normal.

First, to understand the solution one must have an understanding of the inter-related actions and reactions that caused the meat case shortages and livestock price fluctuations experienced in recent weeks, and perhaps into the foreseeable future. The story begins early in 2020 when the livestock markets were reacting negatively to the concerns of the potential impact COVID-19 could have on exports when it hit the U.S.
In mid-March when it became obvious COVID-19 had arrived in the U.S., markets shifted their attention to domestic meat supplies. On March 16 when Ohio’s schools closed, they were no longer offering lunch to 1.7 million schoolchildren. Families were suddenly needing to shop for food – including meat – to prepare at home. A week later Ohio’s stay-at-home order was issued. That resulted in restaurants closing or only offering drive through service and families were once again headed back to the grocery to stock up as they prepared to create even more meals at home. As Americans were now suddenly no longer spending more than a third of their food budget on meals prepared away from home, the markets reacted with a short-lived spike in livestock prices as supply scrambled to keep up with demand in local meat cases.

It’s now April and the markets have shifted their focus away from the demands of simply feeding the consumer, but are now concerned about packing plants operating below capacity or temporarily closing down due to the impact the virus is having on the labor force in those plants. While demands for meat in the retail case remains strong, and livestock inventory is more than adequate to supply that demand, the loss of U.S. harvest capacity is now causing a backlog of market ready livestock at the farm. The net result is strong prices in the meat case at a time when farm gate livestock prices are depressed simply due to the lack of a market outlet.

Today, consumers are again facing the potential for temporary disruptions to the meat supply chain until packing plants can get back to full production. At first glance this may seem to be a short-term problem the consumer can simply manage around. Unfortunately, the same is not necessarily true for the livestock owner.

If a consumer must prepare a meal without meat because of an empty meat case, it’s a meat sale that is lost forever. At the same time, along with lost packing house capacity and resulting delayed animal sales comes market ready livestock that continue to grow – and create more meat – every day they are held off the market. Even when restaurants are allowed to reopen, the question remains, “How quickly will consumers return to restaurants, and can the supply chain quickly shift again and provide the meat they will demand in timely fashion?”

Until COVID-19 subsides and enough healthy work force is available to restore the U.S. packing house capacity and entire supply chain structure, we will continue to deal with the good, the bad and the ugly of a disrupted supply and demand. Consumers may experience temporary meat case shortages while livestock producers will be faced with marketing challenges, depressed prices, and the need to remain flexible in their livestock feeding and marketing plans moving forward.

For more detail regarding the beef cattle market situation, see Garth Ruff’s article, COVID-19 Impact on Ohio’s Beef Industry at https://u.osu.edu/beef/2020/04/22/covid-19-impact-on-ohios-beef-industry/

Also, learn about the impact of COVID-19 on the swine and sheep industries in these recent posts in the Ohio Ag Manager:
COVID-19 Impacts on Ohio’s Swine Industry https://u.osu.edu/ohioagmanager/2020/04/21/covid-19-impacts-on-ohios-swine-industry/  
Measuring Liquidity by Examining Current Ratio & Working Capital

By: Chris Zoller, Extension Educator, Tuscarawas County

The Dairy Excel 15 Measures of Dairy Farm Competitiveness bulletin was published by Ohio State University Extension to provide dairy farmers the ability to evaluate business competitiveness using financial and production information. Measure Eight, Liquidity, as measured by Current Ratio and Working Capital, is discussed in this article.

**Competitive Level:** Current ratio (CR) = 3.0 to 3.5

**Working capital (WC) = ≥ 25% of Gross Revenue**

Liquidity is a measure of the farm business’ ability to pay obligations due in the coming year from the cash on hand and assets that can easily be turned into cash. Liquidity is often measured using the current ratio. This ratio is an indicator of the ability of the current farm assets, if liquidated, to cover current liabilities. A current ratio of 1.5 indicates that there is $1.50 worth of current assets for every dollar of current liabilities. The higher the ratio, the greater the liquidity. The ratio is also an important indicator of short-term financial viability. Another measure of the farm’s liquidity is working capital. Working capital is the difference between the value of the farm’s current assets and current liabilities.

Current assets include cash, savings, and other assets that can easily be converted to cash during the year (e.g., cash, stocks, bonds, feeder livestock, accounts receivable, prepaid expenses, and inventories, such as feed and supplies.) Current liabilities are financial responsibilities that are due within one year of the date of the balance sheet (e.g., accounts payable, operating loans, principal portion of scheduled loan payments, and other accrued expenses). A farm business must be able to pay its current obligations and have a cushion for unexpected cash shortfalls. Cash shortfalls may occur because of disease outbreaks, lower than expected milk production, lower milk prices, higher input prices, or a combination of factors. A current ratio (CR) above 1.0 indicates that a farm has more current assets than current liabilities. A competitive dairy farm must pay its bills and keep its bank obligations up-to-date. A CR of 2.0 is sometimes indicated as being strong, but with highly volatile milk markets, this is not high enough. While receiving milk checks on a regular basis helps with cash flow, long term declines in milk price require cash reserves to pay bills as they are due. The top farms have a CR of 3.5, while average farms that often struggle during market recessions have current ratios of only 2.7.

**If the current ratio is low**

A persistently low current ratio indicates a major cash flow problem. Strategies to improve the farm’s current ratio include:
1. Refinance existing debt with longer repayment terms
2. Sell nonessential intermediate or long-term assets (e.g., machinery and investments), using the proceeds to reduce debt or improve the efficiency of the dairy business
3. Increase the farm’s revenue or decrease expenses, focusing on profitability

A low CR may be the result of a lender extending non-mortgage credit on very short terms, for example, when large pieces of equipment, such as large balers, choppers, or combines, are financed for three years or less. This strategy results in ratios substantially lower than 1.0 for some farmers because large amounts of principal
are due each year. Cash flow is typically very tight. This is not problematic as long as the farm is profitable enough to make the payments and the lender continues to extend credit.

Extending non-mortgage credit gives the lender more control over the loan and the farm. These loans usually are reviewed and renewed at least annually. This large "line of credit" causes some farmers problems when they have bad years and their lenders will not extend additional credit.

Also, other lenders may consider the farm a high risk because of its poor CR. A low CR is usually a minor problem when the farm is profitable and the debt-to-asset ratio is well below 30% (Measure 10). However, this is not a long-term answer, but rather a short-term fix. With price volatility, it is important to have cash available to cover expenses when prices are below breakeven.

**If the current ratio is high**

A high CR indicates surplus cash, which needs to be wisely invested to protect the farm from market downturns. Current assets usually generate lower returns than other assets. If your CR is high, consider investing in assets that generate higher returns (yet allow cash to be accessed when needed).

**Working capital**

Working capital is another way to evaluate the farm’s liquidity and is a measure of the margin of safety in dollars, rather than as a ratio, of the farm’s ability to meet short-term liabilities. The amount of working capital that is adequate is dependent upon the size and scope of the farm business. However, a common recommendation for farms is working capital equal to 25% of gross revenue.

**For more information**

For a copy of the *Dairy Excel 15 Measures of Dairy Farm Competitiveness*, visit [https://dairy.osu.edu/sites/dairy/files/imce/2019%2015%20Measures%20of%20Dairy%20Farm%20Competitiveness%20Final%20%281%29.pdf](https://dairy.osu.edu/sites/dairy/files/imce/2019%2015%20Measures%20of%20Dairy%20Farm%20Competitiveness%20Final%20%281%29.pdf). If you are interested in learning more about the FINPACK program, please contact your local Extension office or visit [https://farmprofitability.osu.edu/](https://farmprofitability.osu.edu/).

**Lawn Care During Above Normal Moisture Conditions**

By: Dr. Gary Graham, Extension Educator – Holmes County

Based on a 50-year average, Ohio receives 37 inches of rain per year. In 2019, we experienced above normal precipitation in both rainfall and snowfall. A total average of 44 inches fell across most of the area. Now, 6.5 inches above the average does not seem like that big of a deal when spread over a 12-month period. The real issue starts back in 2018 when 52 inches, or 15 inches above normal, precipitation fell. While parts of the United States have been dealing with drought issues, most of Ohio has not had but a few short periods of drought over the last few years.

Adding to the issue, the rainfalls over the last two years have come in heavy amounts in short periods of time. NOAA (National Oceanic and Atmospheric Administration) rates a moderate rainfall as 0.10 to 0.30 inches of rain per hour. A heavy rainfall is more than 0.30 inches per hour. Ohio has experienced a great increase of rainfall events above 2” per hour in the last decade with 2018 and 2019 being the leaders. All this leads to soggy conditions, but we were spared the flooding much of the Midwest experienced in 2019 or in Northwestern Ohio.

Overall, 2019 was a very difficult year for farmers to get crops into fields and some fields were never even planted. Some planted fields were flooded out more than once. However, as bleak as 2019 started, the end harvest season turned out to be okay for the crops that were planted and not flooded out. Making good hay was a huge challenge in 2019 and prices for good hay have reflected it.

It was also a difficult year for homeowners. From wet basements, to yards too soggy to mow, to ponds that were at their highest levels in years. We all need to brace ourselves as 2020 is being predicted to be another year with above normal precipitation. NOAA is predicting a 50 to 60% above normal precipitation outlook for 2020.
Ohio.

For our lawns, do not get on them when they’re wet as it can cause compaction. Compaction can take years and years to undo the damage for being impatient to get the yard into shape. It is better to wait once the conditions are better. You can always raise the deck and mow high the first round, and then lower the deck for a second cutting a few days later. Be sure to mow in different patterns so not to create tracks from continuing to follow the same pattern. Smaller clipping sizes will decompose quicker than having large amounts of clippings (that if not raked up could reduce grass health). The key is to not remove more than one-third of the leaf tissue at a time. Healthy lawns are ones with grass 2.5 to 3 inches tall after mowing. Scalloping or cutting the grass shorter than this will increase weed pressure. Because mowing timing could be delayed due to conditions, it is even more critical to have sharp mower blades. Dull mower blades rip the grass blades and can cause browning and dieback of the growth edge.

Another issue with wet lawns is the increase of moss and algae growth. Moss and algae grow where grass establishments are already weak. Conditions where mosses thrive are excessive shade, poor drainage, acidic soils, compacted soils, and low fertility. Mosses form a thick green mat and fill in the gaps from a weak grass stand. Trimming the lower limbs of trees can help open up the areas to more sun helping to dry the areas for the grasses to grow.

A soil test is the only way to know what the pH and fertility is of the lawn. A recently updated Ohio State University Extension fact sheet labeled “Soil Testing for Ohio Lawns, Landscapes, Fruit crops and Vegetable Gardens” explains in detail the process and importance of soil testing. This is a resource for how to understand the soil test results and can be found on our county web page: https://holmes.osu.edu/program-areas/agriculture-and-natural-resources If you’re interested in soil testing, contact the Holmes County Soil and Water Conservation office for soil bags, and sampling kit you can borrow at (330) 674-2811.

Rolling the lawn to smooth out the heaving from winters freeze/thaw cycles is a normal process. It does help to roll when there is slight moisture in the ground but not soggy or very wet. This will just cause even more compaction. Compaction literally pushes the oxygen out of the soil and removes the pore space where oxygen would be to help the grasses grow. If you do roll the lawn, the following step should be to aerate the lawn. Aeration helps the grass roots to get the oxygen and nutrients they require as well as providing a pathway for the moisture to move down through the soil rather than sitting on the surface or running off the surface. Aeration will also help break up the thatch that builds up from mowing.

If you do not own either of these tools, there are companies and individuals who will do this work. Another option is many rental businesses have the equipment that you can rent and do it yourself. Some may even have a tool that will both roll and aerate at the same time. The key to remember is a healthy lawn starts with a healthy grass root system. This is why aeration should always follow rolling a lawn to open up the root zone to oxygen, water and nutrients.

To reach me during this stay at home order due to COVID 19, you email me at graham.124@osu.edu and I will help you. Your OSU Extension office is still open virtually and working from our homes and here to continue serving you. Our web page has many resources for your convenience on COVID 19 and many other topics at http://holmes.osu.edu. You can call and leave a message and it will be forwarded on to the appropriate person, call (330) 674-3015 or email us with the addresses listed here.

The OSU Extension Farm Office is Open
The Farm Office is Open! Each week, the Farm Office Team of Peggy Hall, Dianne Shoemaker, Ben Brown, David Marrison and Barry Ward will be holding weekly live office hours from 8:00 to 9:30 p.m. to update you on current issues affecting the farm economy. Join our experts for quick presentations and plenty of time for you to ask questions. Go to https://go.osu.edu/farmofficelive to register. Recordings will be posted on farmoffice.osu.edu the following day.
David's Beacon Ag Extension Talk Article
By: David L Marrison, Coshocton County Extension Educator, Agriculture & Natural Resources
For Publication on April 22, 2020- The Beacon

Hello Coshocton County! For the past two months I have been thinking about a presentation given by Dr. Scott Shearer at TMK Bakercsille’s crop production meeting in February. The theme for the meeting was “2020 Vision-Time to Think Differently.”

Dr. Shearer is the Chair of Ohio State’s Department of Food, Agricultural and Biological Engineering and during the meeting he encouraged farmers to look at their challenges through a different lens. He also shared the incredible technological advances that are in the pipeline for our agricultural industry.

We know that each year presents us with new challenges. One of the challenges faced by agriculture across the State of Ohio during the past two years has been the weather. As farmers, we cringe at the memory of the delayed and muddy harvest in the fall of 2018. This was followed with excessively wet conditions in 2019. Weather will continue to be an issue as OSU Climatologist Aaron Wilson has shared statistics on how we have lost 5 days in both the spring and fall to do field work.

Now to 2020’s challenges. We have heard and probably used the phrase, “it can’t get any worse.” Well, true to form, 2020 has already surpassed the previous two years in the misery index. 2020 was shaping up to be a good year for agriculture and then the coronavirus pandemic hit.

By mid-April, prices for ag commodities had taken a big tumble compared to before the confirmation of COVID-19 in the United States. Futures prices for feeder cattle, hogs and dairy are all down by over 34%, ethanol is down 27% and corn, wheat, and soybean prices are down 8 to 18%. Overall, it’s predicted, at best case, that net farm income across the nation will be down almost 20% in 2020.

So, true to Dr. Shearer’s theme of thinking differently in 2020, what advice can I offer?

Adjust your budgets- At the beginning of each year, we advocate producers to develop comprehensive budgets for each of their crop and livestock enterprises. Before we hit the fields, make sure to revisit your budgets as a lot has changed in the past six weeks.

For instance, at the beginning of the year, our OSU Extension budgets had estimated the average prices of $3.70 and $9.10 for corn and soybean per bushel. A recent report from the Food and Agricultural Policy Research Institute (FAPRI) predicts the final marketing year averages to be closer to $3.35 and $8.27 respectively minus basis. On the positive for the budgets, farmers may see some savings on their fuel and a few other variable costs to offset the drop in commodity prices.

Trim the Unproductive- We have all heard the phrase of trimming the fat. In 2020, it will be the year to trim the unproductive animal or piece of ground from your operation. For a dairy farmer that may mean looking at voluntarily culling the bottom 5-10% of the herd. Given current milk prices, a cow producing only 35 pounds of milk may not be even covering her daily feed costs. Beef producers should look at their bottom end cows or problem cows. Even though the markets are down, there may be a window in the future to strategically market some animals.

For crop producers, now is the time to take a critical look at your operation field by field. Have you ranked your fields from top to bottom based on their return per acre? Are there fields that you should not farm? Are there sections of existing fields that don’t yield enough to recapture the cost of planting them? Think of the frequently flooded sections or the areas ravaged by wildlife and the lower yielding field margins. Should you consider not planting these areas to commercial crops but instead plant cover crops? It might improve water quality and reduce soil erosion without impacting the overall return per acre.

Be a student of the game- Do your own research. Take a 5 to 10 acre block to conduct your own on-farm
research. Challenge yourself to think outside the box. Test seeding rates, experiment to see if the newest fungicides or insecticides add to or subtract from your bottom line. Increase your scouting efforts this year. Take more time social distance around your livestock and crops.

**Final Thought** - The only certainty we have right now, is the fact there is NO certainty in this pandemic. We truly are in uncharted territory. But remember, we as farmers are prepared for this. The past two years have built our resilience. I encourage you to keep your eyes and hearts upward. Some of the nastiest storms translate into the brightest rainbows.

In closing, I would like to share with you the closing stanza of Ulysses by Alfred Lord Tennyson which states "To strive, to seek, to find, and not to yield." Have a good and safe day!

**Upcoming Programs**
- Backyard Fruit Production Workshop: April 28 Canceled
- Mortality Composting Workshop: May 4 Canceled
- Master Gardener Plant Sale: June 6
- Summer Pasture Walk: July 28
- Summer Pasture Walk: August 25

Congratulations to Bob Bigrigg, Garret Love and Mark Mechling for being the first to ID this in last week’s newsletter as SWAMP CABBAGE