Hello Northeast Ohio Counties!

There have been a few farms that put crops in the ground in the last two weeks here in NE Ohio. Nighttime temperatures over the next couple days may bottom out in the upper 20s.

It is likely that many of us may see field crop damage to crops that were planted early as well as many fruit trees that have already started to bud.

Have a great week!
New FactSheet is Published on Nutrient Removal for Field Crops in Ohio

By: Harold Watter, CPAg/CCA

An update for nutrient recommendations for Ohio’s major field crops (corn, soybean, wheat, and alfalfa) was published in November 2020 as the Tri-State Fertilizer Recommendations for Corn, Soybean, Wheat, and Alfalfa. The call came in shortly after suggesting that we grow several other crops in Ohio that were not included in this update.

With information from the Tri-State update, discussion with state specialists, and a review of the literature, a FactSheet was created to offer assistance for these other agronomic crops beyond corn, soybean, wheat and alfalfa, titled “Nutrient Removal for Field Crops in Ohio”: https://ohioline.osu.edu/factsheet/anr-96 found on OSU Extension’s OhioLine.

The current philosophy in Ohio for crop nutrient management is to apply phosphorus (P) and potassium (K) fertilizer or manure equivalent at crop removal rates. Additionally, if soil test levels of P and K are below the critical level, then a "Buildup" recommendation would be considered to increase soil test levels into the "Maintenance" range.

Tables provided in the new fact sheet include crop removal values for 18 crops, our new tri-state maintenance ranges, and recommendations for N, P & K for these crops. Critical soil test levels have not been recently evaluated for the additional crops beyond corn, soybean, wheat, and alfalfa; however, it is reasonable to assume that critical soil test values used for crops listed here, and in the updated Tri-State Fertilizer Recommendations, can be used as guidance for the small grains and forage crops.

No information is given in this fact sheet for vegetable crops. Please use the information found in the References section for information on where to find out more to develop nutrient recommendations. Consider for these many crops the
same philosophy stated here and in the Tri-State update to only apply maintenance (or crop removal) applications of P & K.

**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.

*Figure 1 Alfalfa stem wilting caused by freezing*
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.

![Leaf and stem necrosis from freeze injury in alfalfa](image)

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 trifoliolate 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?
By: Chris Zoller, David Marrison, and Mike Estadt
Source: https://u.osu.edu/ohioagmanager/2021/04/14/how-will-your-farm-emerge-from-the-coronavirus-pandemic/

Click here for PDF version of article

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.

Northeast Ohio Agriculture

OHIO STATE UNIVERSITY EXTENSION
Ashtabula, Portage and Trumbull Counties
Farm Income Forecast

The USDA’s Economic Research Service (ERS) 2021 Farm Income Forecast 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
- Developing Goals for the Agricultural Business: https://ohioline.osu.edu/factsheet/anr-45
- Conducting a SWOT Analysis of Your Agricultural Business: 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
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
9. Utilize OSU Extension resources – Ohio Ag Manager (https://u.osu.edu/ohioagmanager/), Farm Office (https://farmoffice.osu.edu), Crop Observation and Recommendation
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


Miscanthus Update Announced – Extension Talk
By: Andrew Holden

Hello Ashtabula County! We finally received some April showers after a dry and warm start to the month. We are still a few inches below average in precipitation for the year. The warm weather has also brought some green back to the landscape and flowers to bloom. While the warm weather and spring color is enjoyable, there is still plenty of time for a frost here in NE Ohio. Pay attention to the forecast to protect any plants susceptible to frost. Today I wanted to share some information for landowners with Miscanthus grass as well as an upcoming online program that will focus on Miscanthus in NE Ohio.
Ashtabula County is home to a majority of the Miscanthus here in Ohio and NW Pennsylvania. For anyone unfamiliar with the plant, it is a large biomass crop that grows over 12 feet tall and can be prominently seen along Interstate 90 in eastern part of the county. Recently the company that planted and harvested the Miscanthus has gone out of business. Since it is a specialty crop the market for Miscanthus is limited and special equipment is used to harvest it. This has left landowners with some difficult discussions to make when it comes to what to do with their Miscanthus planted property. While the situation is complex, there are still options and opportunities available. To discuss different options and the current state of Miscanthus, the Ashtabula County Extension Office is holding a live webinar on April 27th at 6:30 PM. I will be joined by the Ashtabula County Auditor’s Office and encourage both landowners and producers to attend. The webinar “Miscanthus Update: For Landowners and Farmers” will discuss the current state of Giant Miscanthus in Northeast Ohio including possible options for landowners with Miscanthus, recommendations for removal, and CAUV updates for Miscanthus owners. This meeting will be beneficial for landowners who have Miscanthus on their property, as well as farmers looking to rent ground that currently has Miscanthus growing on it. The informational session will be concluded with a question and answer session. There is no cost to attend, and the program will be recorded for those unable to attend. The live webinar will be held Tuesday, April 27th at 6:30 P.M. I do ask that if you would like to attend, please register ahead of time. You can do so today at: https://go.osu.edu/mu21

Finally, a major hurdle for those looking to remove their Miscanthus is removing the biomass from the massive crop. Before applying herbicide or tilling the Miscanthus, it must first be mowed down. The size and mass of the grass makes this difficult, and the stalks can even puncture tractor tires. As of today, I am aware of just one custom mower for Miscanthus which is Doxstader’s Custom Harvesting. Contact Josh at 315-794-9088 for prices and scheduling. If you are aware of anyone else who is willing to custom mow Miscanthus, please contact our office so that their information can be shared. For more information on Miscanthus contact our office at 440-576-9008 or attend our public webinar on the 27th.

Andrew Holden is an Agriculture & Natural Resources Extension Educator for Ohio State University Extension. Andrew can be reached at 440-576-9008 or Holden.155@osu.edu

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Miscanthus Update: For Landowners and Farmers

TUESDAY, April 27TH, 6:30 P.M.

Join for a brief Miscanthus update from:
- OSU Extension – Ashtabula County
- The Ashtabula County Auditors Office

This online meeting will discuss the current state of Giant Miscanthus in Northeast Ohio including possible options for landowners with Miscanthus, recommendations for removal, and CAUV updates for Miscanthus owners. This meeting will be beneficial for landowners who have Miscanthus on their property, as well as farmers looking to rent ground that currently has Miscanthus growing on it. The informational session will be concluded with a question and answer session. There is no cost to attend, and the program will be recorded for those unable to attend. Please register ahead of time.

Location: Online via zoom  
Cost: Free

Details: Sign up today at: https://go.osu.edu/mu21

Contact information: For any questions or assistance signing up, please contact Andrew Holden at Holden.155@osu or call 440-576-9008