Hello Northeast Ohio Counties!

Spring is almost here, and NE Ohio winter wheat is looking great and starting to green up.

There has been a lot of conversation going on about whether spring wheat is an option for Ohio farmers. There is a good article into today's issue if you are curious about planting spring wheat.

Just a reminder, if you still need to get your pesticide recertification, please register for our last chance virtual option. See flyer below.

Stay safe and have a good week!
**Weather Update: March is a Time for Transition**

By: Aaron Wilson


Meteorological winter (Dec-Feb) has ended. Looking back, it was the 26th warmest and 16th wettest winter on record for Ohio since 1895. After a very warm December, January and February were a bit on the cool side. A very active late winter pattern brought frequent, moisture-rich storm systems across Ohio, with upwards of 6-8 inches of liquid-equivalent precipitation (snow and rain) falling during February along the Cincinnati to Columbus corridor (Figure 1). This secured February 2022 as the 6th wettest February on record, with differences compared to the long-term average (1991-2020) running at least 2-4 inches above normal for much of the state.

March 2022 has maintained an active weather pattern with large swings in temperatures and plenty of moisture. After highs reached well into the 70s during the weekend of March 5th, this past weekend featured a snowstorm that dropped up to 9 inches of snow across Vinton County, with a large swath of 3-6 inches of snow along and southeast of about I-71. Precipitation is running well above average across the northern Miami Valley, Akron-Canton region, and the far southeast, while drier areas are present across the northwest. Overall, daily average 2- and 4-inch soil temperatures are running in the low to mid 30s with saturated conditions across the state, and rivers and streams are running above normal for this time of year.

![Figure 1 Accumulated precipitation for February 2022. Figure courtesy of the Midwestern Regional Climate Center (https://mrcc.purdue.edu/).](image)
Except for a light shower possible in the western counties on Tuesday, much of this week will be dominated by high pressure and a return flow out of the south. This will bring a strong push of warmer air, as temperatures slowly climb above normal. Highs in the 50s and 60s are expected statewide on Tuesday and Wednesday, with 60s and 70s on Thursday ahead of our next cold front. This front will push through with rain showers on Friday and early Saturday, before improving conditions take over for the rest of the weekend. The Weather Prediction Center is currently predicting 0.25-0.75” inches of liquid-equivalent precipitation over the next 7 days (Figure 2).

The Climate Prediction Center’s 6–10-day outlook for the period of March 20 - 24, 2022 and the 16-Day Rainfall Outlook from NOAA/NWS/Ohio River Forecast Center indicate that temperatures are likely to be above average for the period with wetter than average conditions (Figure 3). Climate averages for this period include a high temperature range of 47-53°F, a low temperature range of 29-34°F, and average liquid-equivalent precipitation of 0.50-1.0 inch.

Figure 2 Precipitation forecast from the Weather Prediction Center for 8pm Monday Mar 14 – 8pm Monday Mar 21.

Figure 3 Climate Prediction Center 6-10 Day Outlook valid for March 20 -24, 2022, for left) temperatures and right) precipitation. Colors represent the probability of below, normal, or above normal conditions.
For an extended look at the upcoming spring season, check out the latest Agronomy and Farm Management Podcast on Wednesday March 16, 2022 by going to go.osu.edu/AFM or podcast.osu.edu/agronomy.

**Applying MAP and DAP at Corn Sidedress**

By: Greg LaBarge, CPAg/CCA  

One fertilization strategy is to apply a two-year rotation phosphorus need ahead of the corn crop. The primary source of phosphorous fertilizer is the nitrogen-phosphorous (N-P) containing products of 11-52-0, Monoammonium Phosphate (MAP) and 18-46-0, Diammonium Phosphate (DAP). For example, the maintenance P need for corn yielding 180-bushel per acre and soybean at 60 bushels is 111 pounds of P2O5 per acre.

When applied in fall, the phosphorus from these products is solubilized and retained in the soil labile phosphorus pool. To supply this P need with MAP or DAP, we also apply 23 or 43 pounds of N with the application. This nitrogen is subject to environmental loss when fall-applied by leaching or denitrification. The net nitrogen result from fall MAP or DAP application is that little of the applied N is available to meet crop needs. By changing MAP and DAP application timing from fall to at sidedress, can we reduce the sidedress need from other N sources? Does this improve the economics of meeting nutrient needs in the rotation?

For this project, the total N rate was set at 180 pounds per acre, the Economically Optimal Nitrogen Rate (EONR) using a nitrogen to corn price ratio of 0.10. At planting, 40 pounds of N was applied in a 2 by 2 placement. The additional 140 pounds of nitrogen was applied to V4-V6 corn. The combination of nitrogen sources to meet the desired N rate was from MAP or DAP plus Urea, or 28% UAN depending on plot treatment to reach the total N need. The Urea product used was Environmentally Smart Nitrogen (ESN), a polymer-coated product to prevent against losses with surface applications. UAN 28% treatment was applied using a coulter injector. The dry fertilizer products were applied with a drop spreader.

Corn grain yields for 2020 and 2021 are shown in Table 1. No statistical differences were shown between the UAN 28% and DAP+Urea or MAP+Urea treatments in either year. The partial budget for the two-year fertilizer program may be advantageous for sidedress P even though nutrient sources have a higher per-unit N price. The calculation presented used fall 2021 fertilizer prices. The UAN 28%
has an extra application trip with the fall P, plus the N from that fall application is lost.

Table 1. Corn yields and two-year fertilizer program cost using surface applied MAP and DAP at sidedress compared to coulter injected UAN 28%.

<table>
<thead>
<tr>
<th>Sidedress Source</th>
<th>2020 Yield (bu/A)</th>
<th>2021 Yield (bu/A)</th>
<th>Two Year Fertilizer Program Cost @ Fall ‘21 prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>UAN 28%</td>
<td>148a</td>
<td>206a</td>
<td>$285</td>
</tr>
<tr>
<td>DAP+Urea(ESN)</td>
<td>151a</td>
<td>202a</td>
<td>$248</td>
</tr>
<tr>
<td>MAP+Urea(ESN)</td>
<td>146a</td>
<td>200a</td>
<td>$268</td>
</tr>
<tr>
<td>LSD (0.1)</td>
<td>6</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>CV%</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

The point of this project was to start a conversation about different fertilizer application timing to increase fertilizer program efficiency. More equipment options are becoming available, making a dry fertilizer program possible. If you are in a liquid program, using 10-34-0 may be an option to consider.

Is Spring Wheat an Option for Ohio Farmers?

By: Laura Lindsey
Source: [https://agcrops.osu.edu/newsletter/corn-newsletter/2022-06/spring-wheat-option-ohio-farmers](https://agcrops.osu.edu/newsletter/corn-newsletter/2022-06/spring-wheat-option-ohio-farmers)

Is spring wheat an option for Ohio farmers? Yes, we can grow spring wheat in Ohio, but *spring wheat yield will be significantly lower* than winter wheat yield.

Last year, in collaboration with University of Wisconsin-Madison, we participated in a small grain resiliency field trial located at the Northwest Agricultural Research Station in Wood County. The goal was to compare several types of small grains to our local standard of soft red winter wheat. Results are shown in Figure 1. On average, soft red winter wheat yielded 97 bu/acre across eight different varieties. As a comparison, durum (planted in the spring) yielded an average of 44 bu/acre and hard red spring wheat yielded an average of 52 bu/acre. The data below represents one year of data; however, similar observations have been made in previous trials conducted in Ohio.
In small grains, the grain fill period begins at Feekes 10.5.4 (kernels watery ripe) and ends at Feekes 11.3 (kernels hard, but dividable with thumbnail). Longer grain fill periods are associated with higher yields. For all four winter wheats (soft red, soft white, hard red, and hard white), the grain fill period was between June 3 and June 30, for a total of 27 days long (Figure 2). However, the grain fill period was only 13 days for the hard red spring wheat (between June 17-June 30) and only 8 days (between June 22 and June 30) for the durum wheat. Although, our winter wheat was planted on September 25, 2021 and the spring wheat was planted on April 5, 2021, all wheat reached maturity at the same time and were harvested on the same date. Thus, the higher yield of winter wheat is likely due in part to the longer grain fill period.
In addition to yield, there are other factors to consider:

1. Do you have a place to sell spring wheat? Is there a market for spring wheat?
2. Can you meet grain quality requirements? Soft red winter wheat and white wheat tend to have low protein (8.5 to 10.5%). Hard red winter wheat has medium to high protein (10.0 to 13.0%) while durum and hard red spring wheat have high protein (10 to 15.0%). For more information on the various wheat classes and requirements, see: https://www.uswheat.org/working-with-buyers/wheat-classes/
3. Although wheat prices are high, spring wheat is probably not the best option in 2022 due to low yields and uncertainty surrounding selling the grain and quality. However, we will continue to look at these various wheat classes this year as opportunities may arise in the state. If interested in wheat, the best option would be to plant soybean this year followed by winter wheat planting in the fall.
Ohio Case Illustrates the Risk of Leaving Farmland to Co-Owners

By: Peggy Kirk Hall
Source: https://farmoffice.osu.edu/blog/thu-03102022-1221pm/ohio-case-illustrates-risk-leaving-farmland-co-owners

In farm estate and transition planning, we caution against leaving farmland to multiple heirs as co-owners on the deed to the property. That’s because Ohio law allows any co-owner of property to seek “partition,” a legal action asking the court to either sell the property and divide sale proceeds among the co-owners or, in some cases, to physically divide the property between co-owners. If the goal of a farm family is to keep property in the family, co-ownership and partition rights put that goal at risk. A recent case from the Ohio Court of Appeals illustrates how partition can force the unwilling sale of property from a co-owner of the property.

The recent court case didn’t involve farmland, but concerned a home and four acres of land owned jointly by an unmarried couple, each on the deed to the property as co-owners with rights of survivorship. The couple separated and one remained in the home, but the two could not agree upon how to resolve their interests in the property. That led to a court case in which one co-owner asked the court to declare that the other had no remaining interest in the property. The other co-owner disagreed and filed a partition claim asking the court to sell the property and divide sale proceeds according to each person’s property interest. The trial court determined that each co-owner did have ownership interests in the property and ordered the property to be sold according to the partition law.

The trial court granted each party the right to purchase the property within 14 days before it would be sold, but neither exercised that right. After an appraisal, the court ordered the property sold and also ordered payment of the outstanding mortgage. That left the court with the challenge of determining how to divide the remaining sale proceeds according to each party’s interests in the property. A complicated analysis of payments, credit card debts, a home equity loan, rental value, and improvements to the property resulted in a final determination that granted one co-owner more of the proceeds than the other.
Both parties appealed the division of proceeds to the Twelfth District Court of Appeals, unfortunately adding more cost and consternation to resolving the co-ownership problem. The court of appeals noted that Ohio law grants a court the duty and discretion to apply broad “equitable” principles of fairness when determining how to divide property interests among co-owners in a partition proceeding. A review of the trial court’s division of the proceeds led the appeals court to affirm the lower court’s holding as “equitable,” ending the three-and-a-half-year legal battle.

Ohio’s partition statute itself provides a warning of the risk of property co-ownership. It states in R.C. 5307.01 that co-owners of land “may be compelled to make or suffer partition…” While the purpose of partition is to allow a co-owner to obtain the value of their property interests, it can certainly force others to “suffer.” If a co-owner can’t buy out another co-owner, the power of partition can force the loss of farm property. As a result, family land can leave the family and a farming heir can lose land that was part of the farming operation. That’s most likely not the outcome parents or grandparents expected when they left their farmland to heirs as co-owners.

Fortunately, legal strategies can avoid the risk of partition. For example, placing the land in an LLC removes partition rights completely, as the land is no longer in a co-ownership situation—the LLC is the single owner of the land. The heirs could have ownership interests in the LLC instead of in the land, so heirs could still receive benefits from the land. The LLC Operating Agreement could contain rules about if and how land could be sold out of the LLC, and could ensure terms that would allow other LLC members to buy out another member’s ownership interests. An agricultural attorney can devise this and other legal strategies to ensure that partition isn’t a risk to farmland or farm heirs. Read the case of Redding v. Cantrell, 2022-Ohio-567.

The Portage County Extension Office is Seeking a Summer Intern

Join OSU Extension in Portage County! We have a COLLEGE STUDENT INTERN position open in Portage County at Ohio State University Extension. Students will support educational programs and community engagement in 4-H Youth Development along with Agriculture and Natural Resources. The intern will work directly with Extension professionals and staff in to address community-based issues. Ohio State or Non OSU students can apply at http://go.osu.edu/portageintern or call 330-533-5538 or email barrett.90@osu.edu with questions regarding a summer of learning, opportunity, and fun working with the staff and residents of Portage County!

Northeast Ohio Agriculture

OHIO STATE UNIVERSITY EXTENSION
Ashtabula, Portage and Trumbull Counties
NORTHEAST OHIO AGRONOMY BREAKFAST WEEKLY WEBINAR SERIES - STARTING FEB 23

The Ohio State Extension Offices of Northeast Ohio is excited to offer The Northeast Ohio Agronomy Breakfast - Weekly Webinar Series. Start the morning off right with a quick one-hour presentation each Wednesday starting on February 23, 2022. Each webinar will cover a different topic and offer time to ask questions to the speakers. **There is no cost to attend**, and everyone is welcome to join. You can register easily online at Register at: [https://u.osu.edu/neoab/](https://u.osu.edu/neoab/)  For any question or for help with registration or zoom, contact Andrew Holden at the Ashtabula County Extension Office at 440-576-9008.

This series will feature a variety of experts on a variety of important agronomic topics, including grain bin fires and safety, farm drainage, corn leaf diseases, soybean disease, and 2022 weather outlooks!

**Schedule:**
- March 16<sup>th</sup>, 8:00 AM – Dr. Horacio Lopez-Nicora on Soybean Disease
- March 23<sup>rd</sup>, 8:30 AM – Dr. Vinayak S. Shedekar on Farm Drainage
- March 30<sup>th</sup>, 8:00 AM – Dr. Aaron Wilson on 2022 Weather Outlook

Register or watch recordings here: [https://u.osu.edu/neoab/](https://u.osu.edu/neoab/)

**Upcoming Extension Programs**

The following programs have been scheduled for NE Ohio farmers. Check back each week as more programs are added to the calendar

Private Pesticide/Fertilizer Applicator Training
March 28, 2022 – Ashtabula County

NE Ohio Agronomy Breakfast Webinar Series Register at [https://u.osu.edu/neoab/](https://u.osu.edu/neoab/)
March 16<sup>th</sup>, 8:00 AM – Dr. Horacio Lopez-Nicora on Soybean Disease
March 23<sup>rd</sup>, 8:30 AM – Dr. Vinayak S. Shedekar on Farm Drainage
March 30<sup>th</sup>, 8:00 AM – Dr. Aaron Wilson on 2022 Weather Outlook

Ohio Small Farm Conference

Northeast Ohio Agriculture
March 12, 2022 – OSU Mansfield Campus

**Backyard Chickens**
March 16, 2022 – Trumbull County Extension Office

**Women in Ag Conference**
March 25, 2022

**Pigweed Identification and Management**
March 31st, 6:00PM - Ashtabula County
April 6th, 1-2:30PM – Portage County
The Ohio State Extension Offices of Northeast Ohio are excited to offer The Northeast Ohio Agronomy Breakfast - Weekly Webinar Series. Start the morning off right with a quick one-hour presentation each Wednesday starting on February 23, 2022. Each webinar will cover a different topic and offer time to ask the speaker questions. There is no cost to attend, and everyone is welcome to join. For any question or for help with registration or zoom, contact Andrew Holden at the Ashtabula County Extension Office at 440-576-9008.

**Schedule:**
- **February 23rd, 9:00 AM** – Peter Dahl speaking on Grain Bin And Dryer Fires
- **March 2nd, 8:00 AM** – Jason Hartschuh speaking on Corn Leaf Disease and Tire Pressure
- **March 8th-9th, 8:30 AM - 4:30 AM** - Conservation Tillage and Technology Conference*  
  *More information on this separate event can be found here: [https://www.allenswcd.com/cttc/](https://www.allenswcd.com/cttc/)
- **March 16th, 8:00 AM** – Dr. Horacio Lopez-Nicora on Soybean Disease
- **March 23rd, 8:30 AM** – Dr. Vinayak S. Shedekar on Farm Drainage
- **March 30th, 8:00 AM** – Dr. Aaron Wilson on 2022 Weather Outlook

**Location:** Online via Zoom  
**Cost:** Free  
**More info:** Contact Andrew Holden at 440-576-9008 or Holden.155@osu.edu

Register at: u.osu.edu/NEOAB
East Ohio Women in Agriculture Conference

Who should attend:
Women and Young Women (high school age) who are interested, involved, or want to become involved in food, agriculture, natural resources, or small business.

This one-day conference is a great place to learn, share and network. Be surrounded by other women who are facing the same day-to-day ups, downs, adventures and dilemmas as you.

AGENDA
9:00    Registration, Network Fair & Breakfast
9:30    Welcome
10:00   Breakout 1
11:00   Breakout 2
12:00   Buffet Lunch
12:45   Keynote
       Stoic or Stressed? Talking through difficult topics in a safe space
       Bridget Britton
       Behavioral Health Field Specialist
1:45    Breakout 3
2:45    Breakout 4
3:30    Closing and Door Prizes

Friday
March 25, 2022
9 A.M. – 3:30 P.M.

Ohio FFA Camp Muskingum
3266 Dyewood Rd SW
Carrollton, OH 44615
https://ffacamp.com/

$55 Adults/ $30 Students

Registration Deadline: March 11

For more information call 330-264-8722

Register online at
go.osu.edu/eowia2022
or complete & send this registration form.

Cancellation Policy: In the event of an unforeseen emergency, the conference will be cancelled by 11:59 PM, March 24, 2022. Attendees will be notified by email. The event will not be rescheduled. No registration fees will be refunded.
<table>
<thead>
<tr>
<th>Session 1</th>
<th>Natural Resources</th>
<th>Plants &amp; Animals</th>
<th>Home &amp; Family</th>
<th>Special Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn about safe operation, sharpening, and maintenance of chainsaws. Stay safe with personal protective equipment. Get cutting!</td>
<td>Managing horses also means managing grass or hay. From equine nutrition to forage species selection, the course has it all.</td>
<td>Explore what research reveals about male and female communication. Learn ways to achieve more productive work settings and peaceful home environments.</td>
<td>A look at up-to-date data on agricultural labor availability and wages, and research on labor management specifically for female operators!</td>
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<thead>
<tr>
<th>Session 2</th>
<th>Natural Resources</th>
<th>Plants &amp; Animals</th>
<th>Home &amp; Family</th>
<th>Special Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-A Preparing to Hunt – Janessa Hill, OSU Extension</td>
<td>2-B Raising Livestock on 5 Acres or Less – Sandy Smith, OSU Extension</td>
<td>2-C Charcuti...what? Everything old is new again! – Kate Shumaker, OSU Extension</td>
<td>2-D Real Women, Real lives: Making Professionalism Purposeful – Cassie Mavis, Morgan Anderson &amp; Mackenzie Ott, State FFA Officers</td>
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<tr>
<td>Are you interested in hunting for recreation or food? Learn about resources, equipment, and more to be successful in the field!</td>
<td>So, you have some land, and you want some extra income or a supply of food for your family. This session will investigate all your options and possibilities.</td>
<td>No matter how you say it, charcuterie has been around for centuries. Learn history, shortcuts, money savers, tips and more!</td>
<td>Identify, observe, and implement female leadership principles. We will dive into the driving forces in strengthening a women’s professional presence.</td>
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<thead>
<tr>
<th>Session 3</th>
<th>Natural Resources</th>
<th>Plants &amp; Animals</th>
<th>Home &amp; Family</th>
<th>Special Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you know that nature is beneficial to every aspect of wellbeing? We’ll explore all the reasons to get out! (May be outdoors weather permitting.)</td>
<td>Are raised beds right you? Learn about construction, soil mixes, plant selection, and ways to minimize weeds, diseases, and insects!</td>
<td>A successful hunt includes safely storing the harvested meat. Learn how to properly pressure can venison, review freezing tips, and more.</td>
<td>Identify, observe, and implement female leadership principles. We will dive into the driving forces in strengthening a women’s professional presence.</td>
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<thead>
<tr>
<th>Session 4</th>
<th>Natural Resources</th>
<th>Plants &amp; Animals</th>
<th>Home &amp; Family</th>
<th>Special Interest</th>
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<tbody>
<tr>
<td>4-A Mushroom Mania – Erika Lyon, OSU Extension</td>
<td>4-B Humane Euthanasia in Livestock – Dr. Sarah Finney, Tri-County Animal Clinic</td>
<td>4-C Basic Clothing Repair –</td>
<td>4-D Cut Flowers for Income –</td>
<td></td>
</tr>
<tr>
<td>Learn the basics of the biology, ecology and identification of some common spring mushrooms while venturing on this outdoor fungal foray. (In the event of bad weather, this session will be moved indoors.)</td>
<td>How to recognize when it's time to euthanize and approved methods of euthanasia in livestock animals.</td>
<td>Learn basic sewing repair and what to look for when purchasing clothing that's long-lasting to help prevent wear and tear.</td>
<td>Learn how to grow, harvest, arrange and market cut flowers.</td>
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**Registration Form**

Name ____________________________________________

Address ____________________________________________________________________________

Phone ___________________________ Email ____________________________

Breakout Sessions: 1__________ 2__________ 3__________ 4__________

Payment Enclosed: $__________ for ________ Adult(s) and/or ________ Student(s)

Please register on-line at go.osu.edu/eowia2022 or mail registration and payment to: OSU Extension Harrison County, ATTN: Women in Ag, 538 North Main St., Ste H, Cadiz, OH 43907
Private Pesticide and Fertilizer Applicator Recertification:
The 3-hr. pesticide re-certification session will offer 3 credits for
CORE and All Categories (1-7). One-hour fertilizer sessions will be
held for those who need to renew their Fertilizer Application
Certification.

DATE: March 30th, 2022
TIME: 5:00 PM – 9:00 PM (Pesticide Recert begins at 5PM, Fertilizer Recert
is 8PM - 9PM)
COST: $35.00 for Pesticide Only & $10.00 for Fertilizer Only ($45.00 for
Both)

To register: https://go.osu.edu/2022recertificationpatfact

Be sure to select the correct date when registering. If you have any
issues, please call the Trumbull County Extension Office, 330-638-6783