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OHIO STATE UNIVERSITY EXTENSION

NORTHEAST OHIO AGRI-CULTURE NEWSLETTER

Your Weekly Agriculture Update for
Ashtabula, Portage and Trumbull Counties

March 2, 2022

Pesticide Recertification in Portage County

In This Issue:

Hello Northeast Ohio Counties!

We’re running a day late with the newsletter here in Trumbull County. We’ve had a heavy news cycle in the last week week with the conflict in Ukraine. You can read how this may impact your agricultural operations with our first article.

Be sure to check out our upcoming programs this month at the end of the newsletter. We have programs to help you learn about maple syrup, pruning, backyard chickens, and a lot more.

We have some sunshine and warmer weather in the forecast so at least you can work on your tan while fixing fence!

Stay safe and have a good week!

Lee Beers
Trumbull County
Extension Educator

Andrew Holden
Ashtabula County
Extension Educator

Angie Arnold
Portage County
Extension Educator

Revisiting Ukraine, Russia, and Agricultural Commodity Markets

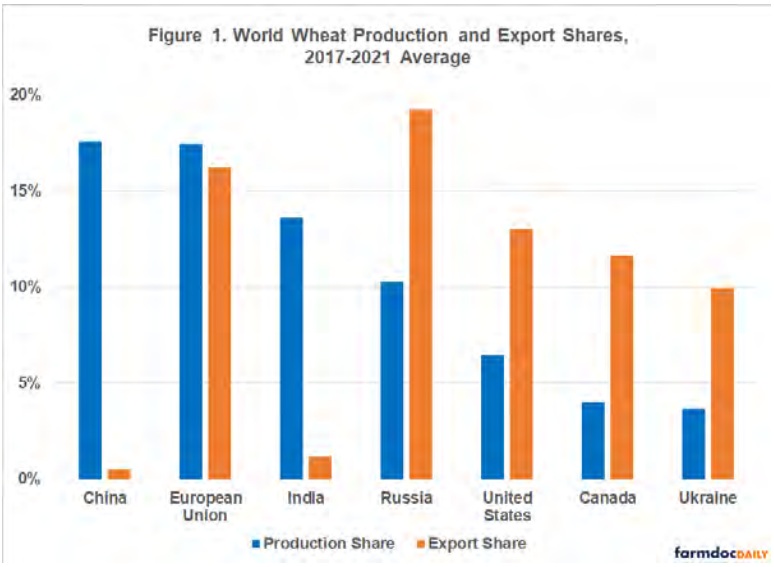
By Nick Paulson, Joe Janzen, Krista Swanson, and Gary Schnitkey, Carl Zulauf
Source: https://ace.illinois.edu/directory/npaulson

Ukraine and Russia have become an important source for global supplies of major agricultural commodities in the past 25 years (*farmdoc daily,* October 11, 2012). These countries, often collectively referred to along with various other Eastern European and Central Asian nations as the Black Sea region, play an important role in the production and export of major grains (corn, wheat, and barley) and oilseeds (especially sunflower and sunflower oil) (Glauber and Laborde, 2022). In addition to the direct toll it will take on the people of the region, the Russian invasion of Ukraine last week introduces many economic concerns including the impact of the conflict on global agricultural markets.

This article summarizes the role of Ukraine and Russia in production and exports of corn, wheat, barley, soybeans, and sunflower oil. The production and export share data provided in all figures is calculated from the USDA Foreign Agricultural Service's Production, Supply and Distribution database (USDA-FAS PSD). Note that we've chosen to consider the members of the European Union (EU) as a single unit in considering production and export shares and comparing them with other countries.

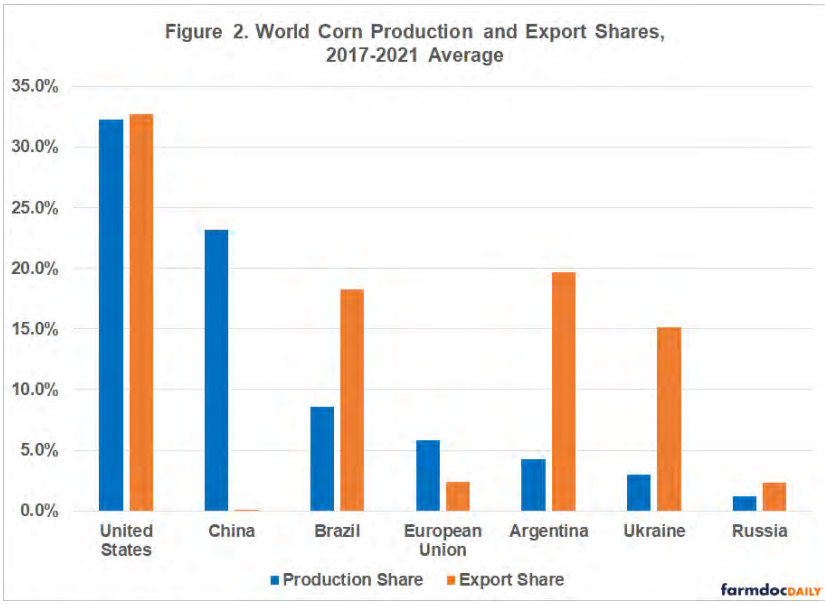
Wheat

Global production and export shares for wheat, averaged from 2017 to 2021, are reported for the top 7 wheat producing countries in Figure 1. Russia and Ukraine account for 14% of global wheat production and rank 1st and 5th, respectively. Both countries are prominent exporters, providing nearly 30% of global wheat exports. The EU, U.S., and Canada are also major producers and exporters of wheat. China and India are major wheat producers, but are net importers and provide relatively small shares of global wheat exports. Other countries with fairly large wheat export shares include Australia (8.4%), Argentina (6.6%), Kazakhstan (4.1%), and Turkey (3.4%).



Corn

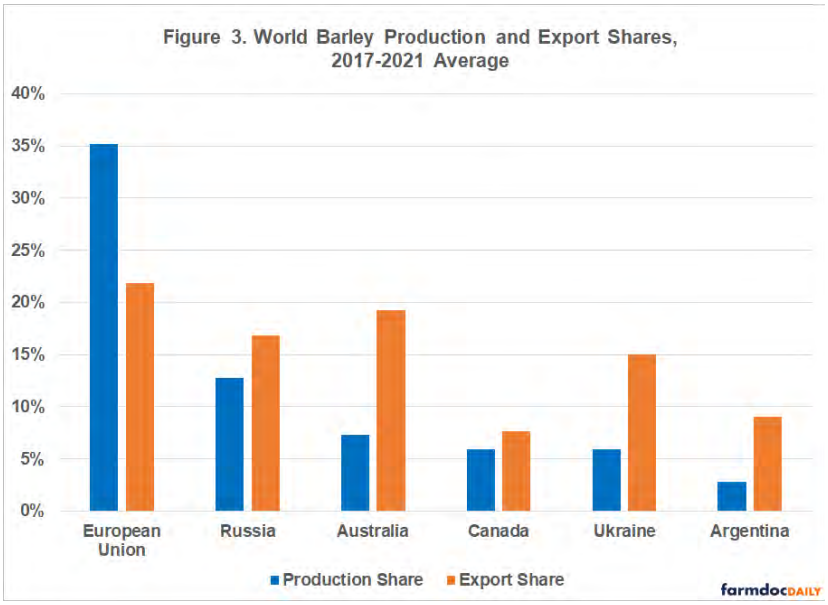
Production and export shares for corn across selected countries are reported in Figure 2. The U.S. remains the dominant global producer (32%) and exporter (33%) for corn. Brazil (18.3%) and Argentina (20%) rank 2nd and 3rd in corn exports. Ukraine now ranks 4th, contributing over 15% of world corn exports. Russia ranks 6th with a 2.3% share of corn exports. Notably, Ukraine has been the dominant supplier of corn to China. A shift towards import of more U.S. corn to China began in 2020 following a poor Ukrainian crop (He, Hayes, and Zhang 2021).



Growth in the share of world corn production and exports from the Black Sea region (Russia, Ukraine, and Kazakhstan) has been substantial, rivaling that of the increase in production in China and both production in and exports from South America over the past twenty years (*farmdoc daily,* June 2, 2017 and November 18, 2020). Corn production in India, Mexico, and South Africa exceeds that in Russia, but account for smaller world export shares.

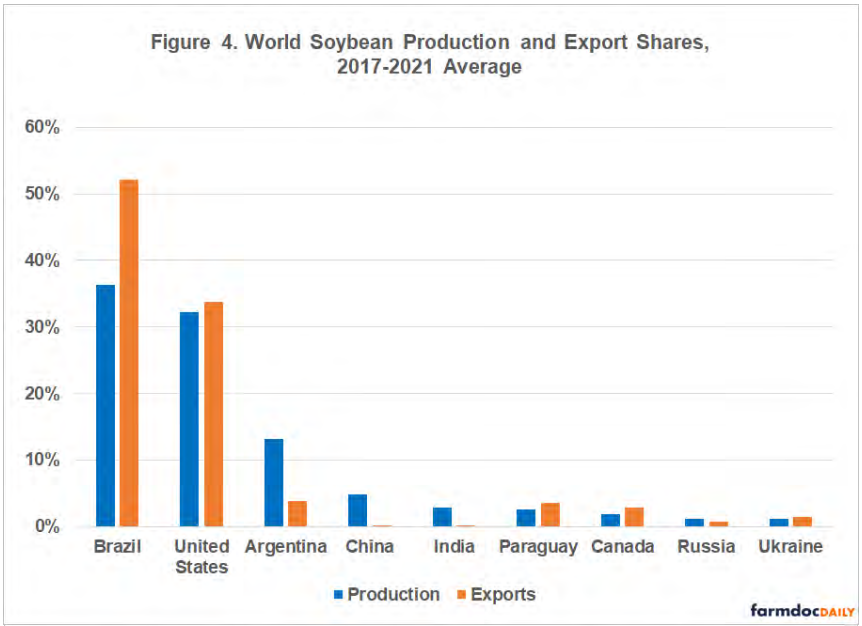
Barley

While the EU holds the dominant production share and is the leading region for world barley exports, Russia and Ukraine account for about 19% of barley production and nearly 32% of barley exports. Australia, Canada, and Argentina are the other major contributors to world barley production and exports.

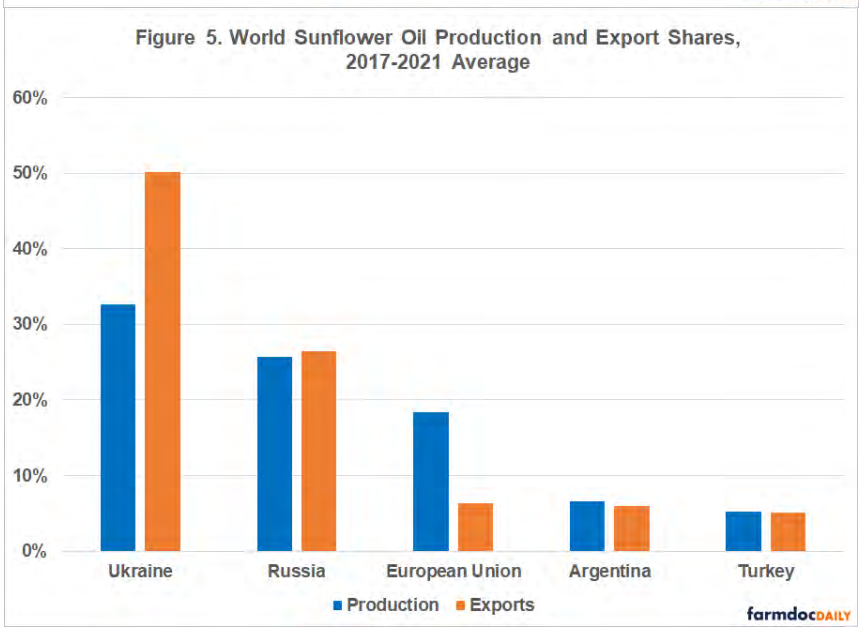


Soybeans and Vegetable Oil

The global soybean market continues to be dominated by the U.S. and South America. Over 82% of world soybean production and nearly 90% of soybean exports come from the U.S., Brazil, and Argentina. Both Russia and Ukraine rank in the top 10 for soybean production and exports, but represent just 2.3% of world production and 2.1% of world exports.



However, Ukraine and Russia are the leading producers and exporters of sunflower oil which comprises a 9% production share and nearly a 2% export share for the world vegetable oil market. Nearly 60% of world sunflower oil production occurs in Ukraine and Russia, and the two countries account for over 75% of world exports.



Discussion

The broad economic implications of last week's Russian invasion of Ukraine, and the resulting sanctions imposed on Russia by the international community, could include disruption of trade flows, greater inflationary pressures, and an increase in volatility across a wide range of global markets.

The invasion is likely to impact the spring planting season for Ukrainian farmers, the magnitude of which will depend on the length and severity of the conflict. Diversion in

trade flows will lead to price pressures and increased volatility for the agricultural commodities for which Russia and Ukraine play relatively large roles in terms of global production and trade. This increased volatility was seen in trading activity last week in wheat and corn futures which included limit (maximum) price moves both up and down across multiple days.

The inability for Ukrainian and Russian agricultural commodities to reach global markets may result in higher prices than would have otherwise occurred to the benefit of grain and oilseed producers in other major producing and exporting countries such as the U.S. However, the market disruptions stemming from the conflict and Russian sanctions will also result in major economic costs. Higher agricultural commodity prices will hurt net agricultural importers, particularly in developing parts of the world.

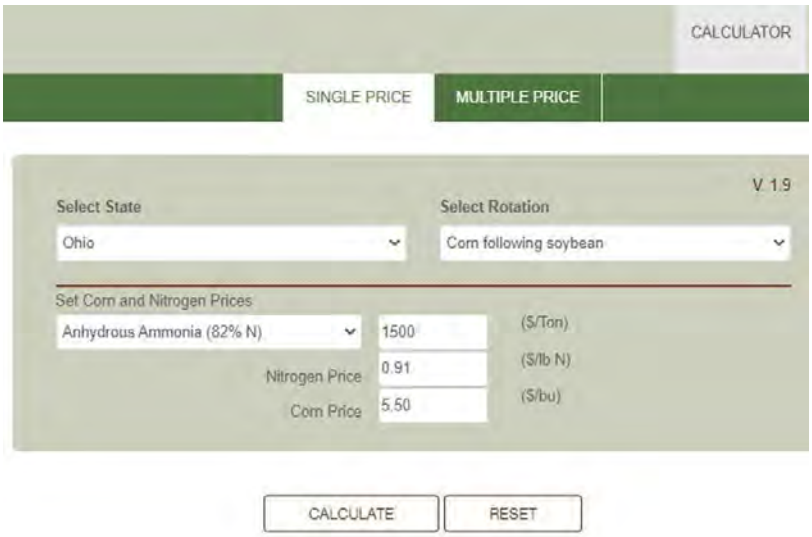
Other costs of the conflict may also hit U.S. agriculture: Increased volatility introduces both opportunities and challenges from a risk management standpoint. Higher prices for agricultural inputs would offset the benefit of higher corn, soybean, and wheat prices for U.S. farmers to some as yet unknown degree. Russia and its ally Belarus are major world suppliers of energy and fertilizer products which could be severely impacted by sanctions (Glauber and Laborde, 2022). With energy and fertilizer prices and volatility already at high levels, the invasion of Ukraine creates additional uncertainty regarding input costs and availability that still might impact the 2022 crop year and also extend to future crop years.

Using the Corn Nitrogen Rate Calculator

By Eric Richer
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-05/using-corn-nitrogen-rate-calculator

Throughout this winter meeting season, fertilizer has been a hot topic. Generally, the discussion has been around nitrogen price and availability. Most of us have little to no influence on price or availability, but as a farmer, you decide your corn (and wheat) nitrogen rates, assuming you can get the nitrogen product you want. Your corn nitrogen rate could likely cost $100 per acre more in 2022 as compared to the year prior and nitrogen will probably surpass seed as the most expensive variable cost per acre this year. As such, it is important to note that the most recent revision (2020) of the *Tri-State Fertilizer Recommendations for Corn, Soybean, Wheat and Alfalfa* moved from nitrogen rate recommendations based on yield--from the original 'Tri-States'--to a nitrogen rate based on maximum profitability or a maximum return to nitrogen (MRTN) rate. Sometimes the maximum return to nitrogen rate is referred to as the Economic Optimum Nitrogen Rate (EONR).

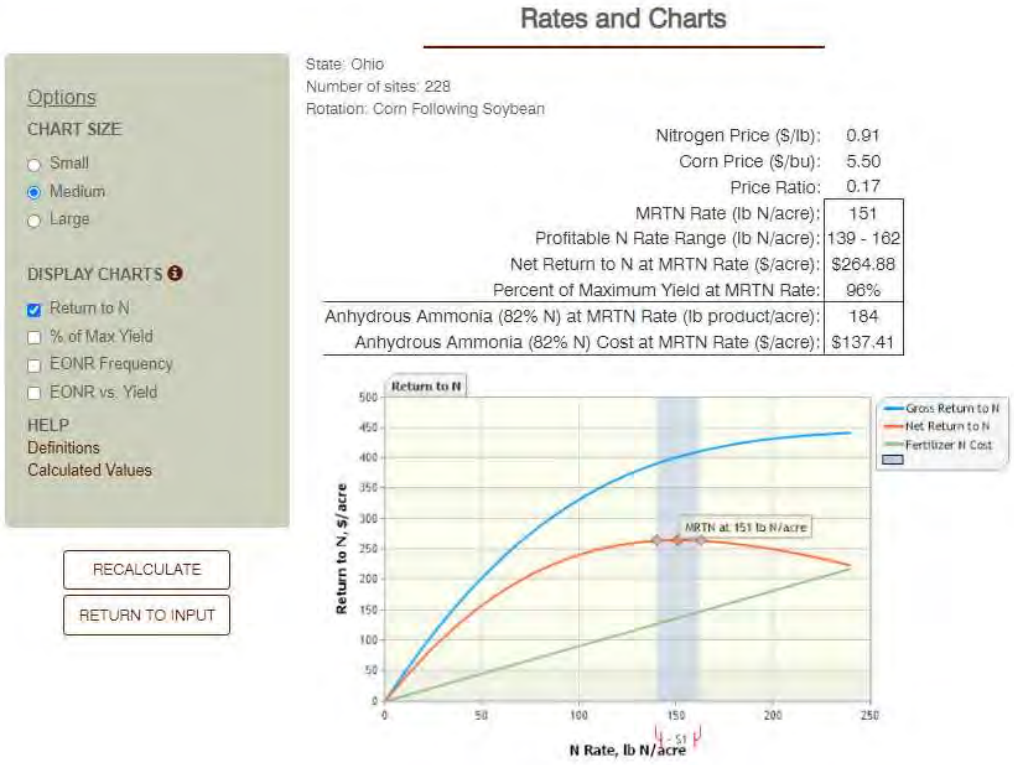
In the Corn Belt, the corn nitrogen rate calculator has been developed to generate these economic optimum rates. The purpose of this article is to help you understand what the corn nitrogen rate calculator is and how to use it. You can find the calculator at http://cnrc.agron.iastate.edu/ The calculator utilizes yield and rate data from on-farm and small plot research trials in Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio and Wisconsin. The Ohio recommendations are based on nearly 300 corn nitrogen rate trials in the state. After selecting your state, you will need to select the crop rotation. See Figure 1. The third input is the source of nitrogen you will use and the price per ton you expect to pay. The final input is the price per bushel of corn at which you expect to sell your corn. Watch this short video to see how to use the Corn Nitrogen Rate Calculator.



Once you click calculate, a return to nitrogen graph is presented with three different lines plotted: Gross Return to N, Net Return to N, and Fertilizer N Cost. The Net Return to N line is arguably the most important. It identifies the N rate where the last unit of added nitrogen has an economic return (EONR) or in other words, it identifies the last unit of N that creates profit for your farm, given the N price and corn price inputs. Additionally, the output page identifies a profitable N rate range that suggests a little bit of 'wiggle room' for your total N rate, often times 10-20 lbs of N *above* and *below* the EONR (aka MRTN).

At a very basic , but helpful level, the output page calculates your nitrogen price per pound based on the product price per ton input. Is nitrogen cost per pound $.90 or $.30 this year? Another basic calculation that the output page provides is the nitrogen-to-corn

price ratio. In the 2021 growing season, many farmers had a nitrogen-to-corn price ratio below one tenth (.1). What is your price ratio this year? See Figure 2 for the outputs when $1,500/ton anhydrous is used in Ohio, corn after soybean rotation, and with an expected corn price of $5.50/bushel.



The corn nitrogen rate calculator identifies an economic optimum rate based on corn and nitrogen prices, all other things constant. As farmers, you know that growing conditions aren't always constant. On your own farm, I encourage you to use local weather, soil type, pre-sidedress N tests, manure history, and previous performance to refine your nitrogen rate in-season or with adaptive nitrogen management approaches.

Solar Energy and Your Farm

Source: https://u.osu.edu/vegnetnews/2022/02/26/solar-energy-and-your-farm/

Whereas photosynthetic organisms convert light to chemical energy, solar panels begin the process of converting light to electrical energy. No one is isolated from the effects and importance of photosynthesis, and it seems that a growing number of people are increasingly reliant on and affected by solar energy in one way or another, too. Farmers and other landowners in Ohio and throughout the U.S. are currently intersecting directly with solar energy in at least four ways. They are using solar energy from the grid, weighing options for leasing land to solar energy projects adding to the grid, exploring options for integrating farming and solar energy production (the process of

“agrivoltaics”), and/or they are experimenting with using electricity they generate using solar capture completed as a ‘private’ activity.

What to look for as you considering leasing land for solar energy development is the subject of three free webinars organized by Penn State University Extension. The webinar held on February 23, 2022 featured Scott R. Kurkoski of Levene Gouldin and Thompson, LLP (https://www.lgtlegal.com/) as the technical presenter. His comments were very practical and informative, especially for landowners in the early stages of evaluating a potential relationship with a solar project. Watch the webinar at https://psu.mediaspace.kaltura.com/media/Leasing+Your+Land+for+Solar+Energy+DevelopmentA+Webinar+on+2-23-22/1_xt3id0rt and consider registering for the webinars to be held on March 16 (Evaluating the Contract Terms When Leasing Your Land for Solar Energy Development; www.bit.ly/solarMarch16) and March 23 (Solar Leasing Questions, Answers, and Wrap-up; www.bit.ly/solarMarch23). Or contact Tom Murphy of Penn State Extension for more information (tbm1@psu.edu) on the webinars.

In an article posted to VegNet on December 19, 2021 (https://u.osu.edu/vegnetnews/2021/12/19/a-simple-inexpensive-diy-system-for-controlling-the-height-of-high-tunnel-sidewall-rollbars-remotely/), I outlined a small but important project involving electricity generated by one solar panel attached to a high tunnel at OSU in Wooster. That panel and the battery it charges has powered an inflation fan, sensors collecting temperature data, four motors driving end wall vents and sidewall motors, and the panel controlling them all nonstop for more than six years. The battery has been replaced once. This is one small example of how on-site solar power generation can benefit a grower.

What happens to and/or can be done with land beneath a large array of solar panels setup to supply the grid (or local operation) is a major question for landowners and solar project officials alike. Officials with no interest in using the land for an additional purpose still tend to require it to be maintained to a basic extent so the project is not compromised. However, in other cases, landowners (farmers) and solar officials explore the “agrivoltaics” (AV) option. Two broad versions of agrivoltaics are taking root but progressing at slightly different rates. In one, land near the solar panels is grazed (e.g., by small ruminants) mainly to control vegetation but also to help generate revenue. In the second version, revenue-generating crops (vegetables? forages? fruit? flowers?) are grown on land beside or below the solar panels. Water released through plant leaves cools the panels by evaporation and reduces the heat-island effect common in solar panel-only facilities. Therefore, the panels operate more efficiently in converting sunlight to electricity. Other potential benefits of AV include more efficient water and land use, less heat stress on plants and panels, and more energy capture – meaningful financial and environmental gains. Clearly, the ‘trick’ is in designing the system to serve and optimize as many functions as possible.

Not surprisingly, agrivoltaics is regarded as a potentially significant partial solution to complex and widespread challenges. AV combines solar power generation and farming. Normally, these processes occur independently and separately. AV theory integrates them in exciting ways by requiring the processes to occur simultaneously on the same land. Early-stage test results in parts of the U.S., Europe, and Australia have created optimism. However, significant challenges exist in integrating photovoltaic power generation and agriculture on working farms. In May, I will be fortunate to begin collaborating with experts at Central Queensland University in Rockhampton, Queensland, Australia and industry partners in identifying the best next steps in utilizing agrivoltaics more effectively, including in Ohio and the region. This Fulbright-supported project will help ensure a rapid and effective transfer of understanding and capacity between OH/the U.S. and Queensland/Australia. Look for updates in these pages and other outlets or contact me anytime for more information on the project.

Biosecurity Alert: Avian Influenza in Commercial Poultry on February 23, 2022

Source: https://extension.psu.edu/biosecurity-alert-avian-influenza-in-commercial-poultry-on-february-23-2022

Poultry producers and hobbyists should be aware that Highly Pathogenic Avian Influenza (HPAI) has been detected in commercial poultry flocks, small/backyard hobby flocks, and in migratory birds in the United States. The USDA Animal and Plant Health Inspection Service (APHIS) has reported 247 H5N1 positive wild birds in nine states on the East coast. In addition, six states have confirmed H5N1 positive commercial and backyard flocks. The most recent HPAI outbreak was confirmed on an egg laying facility in Delaware on February 23, 2022. Flock size has varied between a few birds to several houses on a premises. It is critical that all poultry owners, regardless of flock size, take appropriate biosecurity precautions at this time.

Now is the time to revisit your biosecurity plan. If you do not have a biosecurity plan, it's not too late to start. Preventing the introduction and spread of this devastating disease is essential. While you are working on your biosecurity plan, here are a few key biosecurity practices to implement immediately:

- Keep your poultry away from other birds

- Immediately clean up feed spills to discourage wild birds on your premises
- Limit visitors to only those essential for business. Make sure all visitors follow your biosecurity plan
- Wear dedicated footwear and clothing while servicing your poultry to minimize spreading the virus. Sanitize boots, hands, and tools before entering your flock premises

If you need assistance developing a biosecurity plan, you can visit Penn State Extension's Avian Influenza webpage. To stay informed of the avian influenza situation in the US you can visit the USDA APHIS avian influenza webpage. Finally, if you suspect your flock has been exposed to the HPAI virus, please call the Pennsylvania Department of Agriculture at 717-772-2852.

The Ag Law Roundup

By: Peggy Kirk Hall, Friday, February 25th, 2022
Source: https://farmoffice.osu.edu/blog/fri-02252022-906am/ag-law-roundup

It's time to round up a sampling of legal questions we've received the past month or so. The questions effectively illustrate the breadth of "agricultural law," and we're happy to help Ohioans understand its many parts. Here's a look at the inquiries that have come our way,

I'm considering a carbon credit agreement. What should I look for? Several types of carbon credit agreements are now available to Ohio farmers, and they differ from one another so it's good to review them closely and with the assistance of an attorney and an agronomist. For starters, take time to understand the terminology, make sure you can meet the initial eligibility criteria, review payment and penalty terms, know what types of practices are acceptable, determine "additionality" requirements for creating completing new carbon reductions, know the required length of participation and how long the carbon reductions must remain in place, understand how carbon reductions will be verified and certified, be aware of data ownership rights, and review legal remedy provisions. That's a lot! Read more about each of these recommendations in our blog post on "Considering Carbon Farming?"

I want to replace an old line fence. Can I remove trees along the fence when I build the new fence? No, unless they are completely on your side of the boundary line. Both you and your neighbor co-own the boundary trees, so you'll need the neighbor's permission to remove them. You could be liable to the neighbor for the value of the trees if you remove them without the neighbor's approval, and Ohio lawallows triple that value if you remove them against the neighbor's wishes or recklessly harm the trees in the process of building the fence. You can, however, trim back the neighbor's tree branches to the property line as long as you don't harm the tree. Also,

Ohio's line fence law in ORC 971.08 allows you to access up to 10 feet of the neighbor's property to build the fence, although you can be liable if you damage the property in doing so.

I want to sell grow annuals and sell the cut flowers. Do I need a nursery license? No. Ohio's nursery dealer license requirement applies to those who sell or distribute "nursery stock," which the law defines as any "hardy" tree, shrub, plant, bulb, cutting, graft, or bud, excluding turf grass. A "hardy" plant is one that is capable of surviving winter temperatures. Note that the definition of nursery stock also includes some non-hardy plants sold out of the state. Because annual flowers and cuttings from those flowers don't fall into the definition of "nursery stock," a seller need not obtain the nursery dealer license.

Must I collect sales tax on cut flowers that I sell? Yes. In agriculture, we're accustomed to many items being exempt from Ohio's sales tax. That's not the case when selling flowers and plants directly to customers, which is a retail sale that is subject to the sales tax. The seller must obtain a vendor's license from the Ohio Department of Taxation, then collect and submit the taxes regularly. Read more about vendor's licenses and sales taxes in our law bulletin at this link.

I'm an absentee landowner who rents my farmland to a tenant operator. Should I have liability insurance on the land? Yes. A general liability policy with a farm insurer should be affordable and worth the liability risk reduction. But a few other steps can further minimize risk. Require your tenant operator to have liability insurance that adequately covers the tenant's operations, and include indemnification provisions in your farm lease that shift liability to the tenant during the lease period. Also consider requiring your tenant or hiring someone to do routine property inspections, monitor trespass issues, and ensure that the property is in a safe condition.

My neighbor and I both own up to the shoreline on either side of a small lake--do I have the right to use the whole lake? It depends on where the property lines lay and whether the lake is connected to other waters. If the lake is completely surrounded by private property and not connected to other "navigable" waters, such as a stream that feeds into it, the lake is most likely a private water body. Both of you could limit access to your side of the property line as it runs through the lake. You also have the legal right to make a "reasonable use" of the water in the lake from your land, referred to as "riparian rights." You could withdraw it to water your livestock, for example; but you cannot "unreasonably" interfere with your neighbor's right to reasonably use the water. The law changes if the lake is part of a "navigable" waterway. It is then a "water of the state" that is subject to the public right of navigation. Others could float on and otherwise navigate the water, and you could navigate over to your neighbor's side. Public users would not have the riparian rights

that would allow them to withdraw and use the water, however, and would be trespassing if they go onto the private land along the shore.

If I start an agritourism activity on my farm, will I lose my CAUV status? No, not if your activities fit within the legal definition of "agritourism." Ohio law states in ORC 5713.30(A)(5) that "agritourism" activities do not disqualify a parcel from Ohio's Current Agricultural Use Valuation (CAUV) program. "Agritourism," according to the definition in ORC 901.80, is any agriculturally related educational, entertainment, historical, cultural, or recreational activity on a "farm" that allows or invites members of the general public to observe, participate in, or enjoy that activity. The definition of a "farm" is the same as the CAUV eligibility—a parcel devoted to commercial agricultural production that is either 10 acres or more or, if under 10 acres, grosses $2500 annually from agricultural production. This means that land that is enrolled in the CAUV program qualifies as a "farm" and can add agritourism activities without becoming ineligible for CAUV.

Send your questions to aglaw@osu.edu and we'll do our best to provide an answer. Also be sure to check out our law bulletins and the Ag Law Library on https://farmoffice.osu.edu, which explain many of Ohio's vast assortment of agricultural laws.

Plan Now for Improving "Winter" Damaged Pastures

By: Stan Smith
Source: https://u.osu.edu/beef/2022/03/02/plan-now-for-improving-winter-damaged-pastures/#more-12123

This is a common appearance for winter feeding areas in Ohio

Ohio's roads and highways aren't the only things that have suffered from a winter that's alternated between sub-freezing temperatures, and abundant rainfall on top of already saturated surfaces. As spring quickly approaches, pastures and paddocks that served as cattle feeding areas this winter are a sea of pocked up mud. While road crews will be out repairing damaged roads by tamping cold patch into the potholes, it's simply not that easy to repair soils that are expected to support life in the form of growing plants during the coming months.

That said, a key decision many face regards whether or not reseeding these pasture paddocks that suffered from Mother Nature's abuse this winter is the most efficient option to get these areas back into productive forage? Let's look at some options and management strategies that might be considered.

One low-cost option, at least in terms of out-of-pocket expense, is to do nothing. In the absence of competition from existing plants, given enough time nature will re-grow something in paddocks that were trampled while muddy. The cost in this option is time. If you have the land base to set aside those torn up paddocks through the spring and early summer, they will renovate themselves. Dragging these areas with a harrow once they dry a bit will level off the high spots, but beyond that we generally have plenty of seed bank in the soil that will eventually regenerate vegetation. Whether that seed bank contains desirable plants, or what percentage of desirable plants will make-up the re-growth are questions to be considered.
It's likely in those paddocks where the sod base was torn up that summer annual weeds like pigweed, ragweed, barnyard grass and goose grass will show up in heavy numbers in addition to the grasses and clovers that had been present in the sod base. Clipping annual weeds off before they go to seed will allow more light into the grasses and clovers that are coming back. By mid to late summer a light grazing pass could be made on these paddocks. If they are not torn up again next winter, the sod base – especially if it was previously fescue – will continue to thicken and good rotational grazing management can put them back into productive pasture paddocks the following year. The main question that must be answered in this option is; do you have the time and pasture land base to be able to wait for the paddock to heal itself and perhaps lose an entire grazing season of productivity?

The next option to consider is re-seeding. Re-seeding offers the possibility to increase pasture productivity and to bring a new mix of forages into the pasture paddock. When Bob Hendershot, retired NRCS State Grasslands Specialist, spoke to graziers, one of the points he made is related to pasture species genetics. Bob always pointed out that row crop producers use new and improved genetics to increase crop yields and as livestock producers we seek to improve our livestock genetic base, but we don't often give that same attention to pasture genetics. Bob frequently asked, "How old are the genetics in your pasture forages?" There have been advances in forages; grasses and legumes bred to better tolerate grazing, and genetics that allow plants to be more palatable and productive. A sacrifice paddock that has suffered from trampling and reduced stands may be an opportunity to bring some new and improved forage genetics into the pasture mix.

Talk with your seed representative or County Extension Agriculture Educator about a pasture mix of specific species that might work best for your situation. However, as we look at today's cost of applying nitrogen to grass forages, all graziers should aim for

30% stand of evenly distributed legumes throughout a grass stand. At this level, supplemental nitrogen should not be needed in future years. If the area to be planted needs to be covered quickly due to erosion concerns and/or quicker production is needed for grazing, then include some annual ryegrass seed in the seeding mixture. Adding around 4 pounds of annual ryegrass per acre should provide some early cover and an early grazing pass because it is quick to germinate and grow.

If the choice is made to do a new seeding, this is also an ideal time to consider making any necessary adjustments to fertility. This obviously begins with a soil test.

Soil pH should be above 6.0, with a goal of 6.5. Soil phosphorus (P) level should be 30 to 50 ppm when using the Mehlich III soil test extraction. Given an average Ohio cation exchange capacity (C.E.C.) of 10, soil potassium (K) level should be at least 120 ppm. If your soil tests are reported in pounds per acre instead of ppm, then these numbers should be doubled, respectively.

If your soil is not close to these numbers it may be worthwhile to put off a spring seeding, apply the needed lime and fertilizer this spring, spend time controlling the weeds that will emerge and aim for an August seeding. In those paddocks that are severely torn up, it offers the rare opportunity in a pasture situation to spread lime and/or fertilizer and then use tillage to incorporate it into the root zone while smoothing out the soil surface and preparing a new seed bed.

There are options available that allow beaten up pasture paddocks to recover and become productive grazing paddocks again. The specific option chosen depends upon the resource base of the producer, farm forage goals, and timing. Regardless the option used, planning, management and some cooperation from Mother Nature are necessary to achieve success.

Register Now for Conservation Tillage & Technology Conference

By: Mark Badertscher
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-04/register-now-conservation-tillage-technology-conference

Don’t miss out on your opportunity to register for the Conservation Tillage & Technology Conference (CTTC) at early bird rates. The annual conference plans to be in- person March 8-9 at Ohio Northern University in Ada after being virtual this past year. Connect with other farmers and CCA’s, experience new ideas, and increase your net income. Historically over 800 individuals will attend each day of

this two-day conference, making it the largest agricultural meeting in northwestern Ohio.

Registration is a flat rate of $100 (after February 25, registration is $150). This registration is available online at https://www.allenswcd.com/cttc/ and includes exclusive access to all presentations online after about March 21. These will be available until April 22. For Crop Consultants, the QR code will be active for that month. (Crop Consultants must register individually to receive CCA credits.)

Take advantage of the opportunity to discuss one-on-one with speakers, exhibitors, sponsors, and other participants. As noted above, your registration includes exclusive online video-demand access to all presentations for a month, starting about March 21. Currently, ONU requires that everyone wear a mask while inside a building.

This year's schedule has been set and Tuesday, March 8 concurrent sessions are Agronomic Crop Management, Nutrient Management, Precision Ag & Technology, Soil Health, Cover Crops, and No-Till. Wednesday, March 9 concurrent sessions are: Agronomic Crop Management, Water Quality and Conservation Practices, Sustainable Ag, Soil Health, Cover Crops, and No-Till. Move from room to room to hear from approximately 60 speakers and panelists. Spend time visiting with exhibitors and networking with other farmers and crop consultants and others in the agricultural industry.

The meeting and program have been developed by The Ohio State University Extension Specialists along with Agriculture and Natural Resources Educators in local counties with assistance from local Soil and Water Conservation Districts and the United States Department of Agriculture Natural Resources Conservation Service. For more information on this year's Conservation Tillage & Technology Conference, visit ctc.osu.edu to see the full program.

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/ 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 dieses, soybean disease, and 2022 weather outlooks!

Schedule:

- ❑ March 8th-9th, 8:30-4:30 AM -Conservation Tillage and Technology Conference*
  *More information on this separate event can be found here: 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

Register at: 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

New Private Pesticide Applicator Training
March 8, 2022 – Portage County

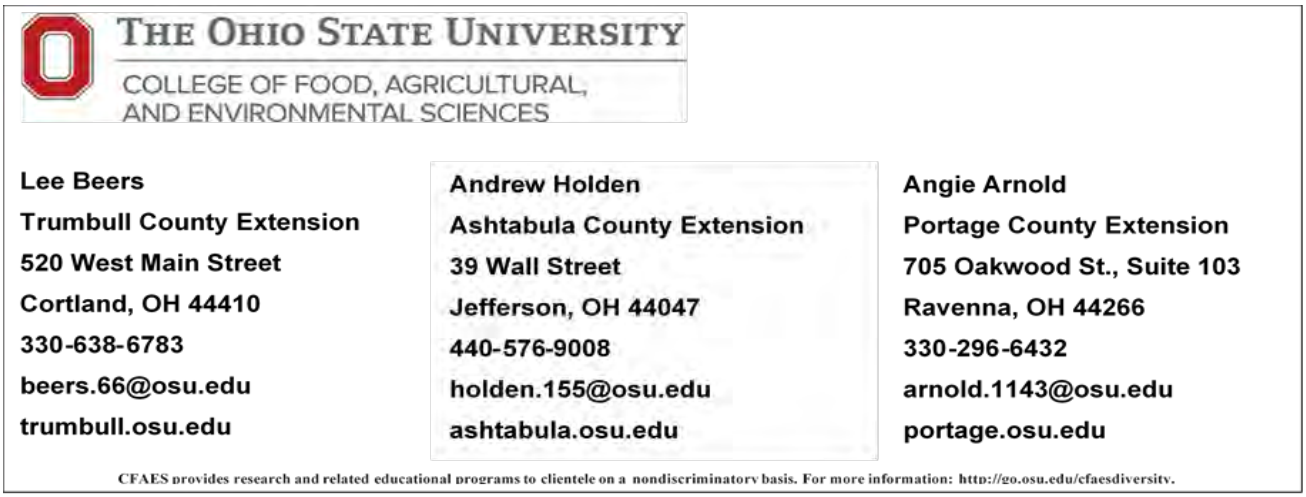
NE Ohio Agronomy Breakfast Webinar Series Register at https://u.osu.edu/neoab/
March 16th, 8:00 AM – Dr. Horacio Lopez-Nicora on Soybean Disease
March 23rd, 8:30 AM –Dr. Vinayak S. Shedekar on Farm Drainage
March 30th, 8:00 AM – Dr. Aaron Wilson on 2022 Weather Outlook

March Into Pruning
March 5, 2022 – Hartford Orchards

Ohio Small Farm Conference
March 12, 2022 – OSU Mansfield Campus

Backyard Chickens
March 16, 2022 – Trumbull County Extension Office

Women in Ag Conference
March 25, 2022


THE OHIO STATE UNIVERSITY
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CFAES

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Maple101

Beginners and experienced producers wishing to hone sugaring skills will learn everything from tree identification and sugar bush management to producing the finished product.

Cost $20.00 per person

Because of COVID Restrictions the class will be limited to **30 participants**. Will follow COVID regulations as per Lake Metro Park. Subject to change due to COVID Protocol.

To register, or if you have any questions, please call the Extension office at 440-834-4656. Mail your check payable to OSU Extension, P.O. Box 387, Burton, OH 44021.

SATURDAY

March 5, 2022

8 AM – 11 AM
Pre-registration required by March 1
No walk-ins
Registration 7:30 AM – 8 AM
Sugar Bush Tour 8 AM – 9 AM
Maple 101 Classroom 9 AM – 11 AM

LOCATION:

Lake Metroparks Farmpark Welcome Center
8800 Euclid Chardon Rd., Kirtland, OH 44094

Registration for Maple 101 March 5, 2022. Mail your check by March 1 payable to OSU Extension, P.O. Box 387, Burton, OH 44021.

Name: _____

Address: _____

City: _____ State: _____ Zip: _____ Phone: _____

Number Attending Maple 101 x $20 per person = $ _____

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GEAUGA COUNTY
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OHIO STATE UNIVERSITY EXTENSION

March Into Pruning

Fruit Tree Pruning Clinic

Hartford Orchard
6953 OH-305
Hartford, OH 44424

March 5, 2022
9:00A.M – 11:00A.M
$15/person

Did you ever want to learn how to prune your apple, pear, or other fruit tree? Here's your chance! You even get to practice on someone else's tree! OSU Extension and Hartford Orchards LLC are teaming up to bring you a morning full of hands-on pruning experience on March 5, 2022. The morning will start with a quick overview of pruning basics before we head out to the orchard to get firsthand experience deciding what to prune, and when to stop cutting.

Dress for the weather, and bring your pruners, loppers, and saws! We will be getting our hands dirty, so bring gloves too! Cost for the class is $15/person and includes refreshments, handouts, and the first 15 registrants get a free pair of hand pruners. Call 330-638-6783 for more information. You can register online at https://go.osu.edu/pruning2022 or complete the bottom portion and return to the OSU Extension Office.

2022 PRUNE INTO MARCH REGISTRATION FORM

Complete the below information and send with payment to OSU Extension Trumbull County, 520 West Main Street, Cortland, OH 44410.

Name: _____

Address: _____

Phone: _____ Email: _____

Number Attending: _____ X $15/person = _____ Enclosed

Please make checks payable to OSU Extension

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OHIO STATE UNIVERSITY EXTENSION

Portage County

New Pesticide Applicator Training

March 8th, 2022

A Private Pesticide Applicator's License is required those who want to apply restricted-use pesticides on his/her own land (or rented land) and produce an agricultural commodity. ODA requires each private applicator to take & pass the CORE (safety) test and any category(ies) that correspond to the crops he/she produces. **This training will focus primarily on the CORE test.** There are 7 categories in which one may be certified via testing through ODA: 1-Grain and Cereal Crops, 2-Forage Crops and Livestock, 3-Fruit and Vegetable Crops, 4-Nursery and Forest Crops, 5-Greenhouse Crops, 6-Fumigation, and 7-Specialty Uses.

The 3-Hour New Pesticide Applicator Training will cost $35 per person.

Date: March 8th, 2022
Time: 9:00 AM to 12:00 PM
Location: Portage Soil and Water, 6970 State Rt. 88 Ravenna, OH 44266
Cost: $35 per person includes CORE training materials, handouts, and light refreshments. Category study materials can be purchased at an additional cost at each Extension Office.
Register: Mail a check made out to 'OSU Extension' call to reserve your spot. RSVP by March 1th
For more information call: 330) 296-6432 or email Angie Arnold arnold.1143@osu.edu

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We Sustain Life

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OHIO STATE UNIVERSTY EXTENSION

Northeast Ohio Winter Beef Clinic

Thursday , March 10th 2022 | 6:30 P.M. to 8:30 P.M.

Beef Cattle Nutrition with Dr. Steve Boyles -6:30

Beef Quality Assurance with Andrew Holden -7:30

Join us for an informative night of beef production and get BQA certified/recertified. The Ashtabula County Cattlemen's Association and Ashtabula County OSU Extension are partnering to offer another great Winter Beef Clinic. The first hour will feature Dr. Steve Boyles, Beef Cattle Extension Specialist for Ohio State University. The second hour will include Beef Quality Assurance (BQA) Training from Andrew Holden, ANR Educator. This training will certify new participants, as well as recertify those who have completed past trainings.

Location: Ashtabula County OSU Extension Office 39 Wall Street Jefferson, Ohio 44047

Cost: Free **Registration:** RSVP for this program by calling the Ashtabula County Extension Office at 440-576-9008 or E-Mailing Andrew Holden at Holden.155@osu.edu

This event is limited in capacity so reserve your spot today!

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Co-Sponsored by the Ashtabula County Cattlemen's Association