Hello Coshocton County! We continue to struggle to work around rain with more forecasted for tomorrow and Friday. While we have gotten a good portion of the crops in, we still have a ways to go. I hope as we move into June that we will get a clear run to finish planting and to get hay season under way.

For anyone looking for more on-farm storage, you may wish to explore the FSA’s Farm Storage Facility Loan program. It is a really good way to increase your commodity storage (even for hay storage). See the 2nd article in today’s newsletter.

As we end the month of May, I am thankful for the many men and women who gave the ultimate sacrifice for our freedom. I hope you pause and give thanks to these patriots this weekend. Have a blessed and safe Memorial Day.

Have a good and safe week!

Sincerely,

David L. Marrison

Coshocton County OSU Extension ANR Educator
Higher input costs and higher crop prices have been the theme for the last several months. Higher production costs in 2021 gave way to even higher costs for the 2022 production year. Factors affecting both supply and demand have continued to drive commodity crop prices higher. The result of all of this change is a positive margin outlook for 2022 commodity crops.

Production costs for Ohio field crops are forecast to be higher than last year with higher fertilizer prices leading the way. Variable costs for corn in Ohio for 2022 are projected to range from $578 to $708 per acre depending on land productivity. The trend line corn yield (183.7 bpa) scenario included in the corn enterprise budget shows an increase in variable costs of 44%.

Variable costs for 2022 Ohio soybeans are projected to range from $311 to $360 per acre. Variable costs for trend-line soybeans (56.5 bpa) are expected to increase 40% in 2022 compared to 2021.

Wheat variable expenses for 2022 are projected to range from $249 to $321 per acre. The trend line wheat yield (74 bpa) scenario included in the wheat enterprise budget shows an increase in variable costs of 50%. Returns will likely be positive for most producers depending on crop price change throughout the rest of the year. Grain prices used as assumptions in the 2022 crop enterprise budgets are $7.00/bushel for corn, $14.25/bushel for soybeans and $7.50/bushel for wheat. Projected returns above variable costs (contribution margin) range from $450 to $835 per acre for corn and $333 to $606 per acre for soybeans. Projected returns above variable costs for wheat range from $195 to $345 per acre although significant crop price increases since last fall (when the price was set for this enterprise budget) will likely cause wheat to be more profitable than these return projections indicate.

Return to Land is a measure calculated to assist in land rental and purchase decision making. The measure is calculated by starting with total receipts or revenue from the crop and subtracting all expenses except the land expense. Returns to Land for Ohio corn (Total receipts minus total costs except land cost) are projected to range from $260 to $619 per acre in 2022 depending on land production capabilities. Returns to land for Ohio soybeans are expected to range from $205 to $462 per acre depending on land production capabilities. Returns to land for wheat (not including straw or double-crop returns) are projected to range from $100 per acre to $239 per acre assuming a planting-time price of $7.50/bushel. If a current forward harvest price for wheat of $11.50/bushel is used, the Return to Land is in a much higher range of $325 to $576 per acre depending on land production capabilities.

Total costs projected for trend line corn production in Ohio are estimated to be $1,054 per acre. This includes all variable costs as well as fixed costs (or overhead if you prefer) including machinery, labor, management and land costs. Fixed machinery costs of $78 per acre include depreciation, interest, insurance and housing. A land charge of $207 per acre is based on data from the Western Ohio Cropland Values and Cash Rents Survey Summary. Labor and management costs combined are calculated at $105 per acre. Details of budget assumptions and numbers can be found in footnotes included in each budget.

Total costs projected for trend line soybean production in Ohio are estimated to be $678 per acre. (Fixed machinery costs: $62 per acre, land charge: $207 per acre, labor and management costs combined: $60 per acre.)

Total costs projected for trend line wheat production in Ohio are estimated to be $593 per acre. (Fixed machinery costs: $36 per acre, land charge: $207 per acre, labor and management costs combined: $52 per acre.)
Data used to compile these enterprise budgets includes research, surveys, market data, economic modeling, calculations and experience of authors.

Current budget analyses indicates very favorable returns for all three primary commodity crops but crop price change and harvest yields may change this outcome. These projections are based on OSU Extension Ohio Crop Enterprise Budgets. Newly updated Enterprise Budgets for 2022. have been completed and posted to the Farm Office website: https://farmoffice.osu.edu/farm-mgt-tools/farm-budgets

**Need More Commodity Storage? Consider a USDA Farm Storage Facility Loan**

by: Eric Richer, OSU Extension-Fulton County

Source: [https://u.osu.edu/ohioagmanager/2022/05/20/need-more-commodity-storage-consider-a-usda-farm-storage-facility-loan/](https://u.osu.edu/ohioagmanager/2022/05/20/need-more-commodity-storage-consider-a-usda-farm-storage-facility-loan/)

For many farmers, on-farm storage is a key part of a comprehensive commodity marketing plan. A unique farm program administered through the Farm Service Agency (FSA) is the Farm Storage Facility Loan (FSFL) program. FSA is part of the U.S. Department of Agriculture (USDA) which uses this program to provide low-interest financing for producers to store, handle, and/or transport eligible commodities they produce. The list of eligible commodities, facilities, equipment, and upgrades is quite impressive. Generally, they include the following:

- Acquiring, constructing or upgrading new or used, portable or permanently affixed, on-farm storage and handling facilities.
- Acquiring new or used storage and handling trucks; and
- Acquiring new or used permanently affixed storage and handling equipment.

A producer may borrow up to $500,000 per loan, with a minimum down payment of 15 percent. Loan terms are 3 to 12 years, depending on the amount of the loan. The May 2022 interest rate for all term lengths of the FSFL program is 2.625%. Producers must demonstrate storage needs based on three years of production history. FSA also provides a microloan option that, while available to all eligible farmers and ranchers, also should be of particular interest to new or small producers where there is a need for financing options for loans up to $50,000 at a lower down payment (5 percent) with reduced documentation. There is a nonrefundable $100 application fee per borrower for this program.

**Who is eligible?**

An eligible borrower is any person who is a landowner, landlord, leaseholder, tenant or sharecropper. Eligible borrowers must be able to show repayment ability and meet other requirements to qualify for a loan. Contact an FSA office for more details. Eligible storage structures and handling equipment, having a useful life for the entire term of the loan, may be permanently affixed or portable. Facilities built for commercial purposes and not for the sole use of the borrower(s) are not eligible for financing.

**Eligible Commodities**

The following commodities are eligible:

- Corn, grain sorghum, rice, soybeans, oats, peanuts, wheat, barley, or minor oilseeds harvested as whole grain;
- Corn, grain sorghum, wheat, oats or barley harvested as other-than-whole grain and malted small grains
- Other grains (triticale, rye, speltz, and buckwheat) and pulse crops (lentils, chickpeas and dry peas);
- Hay, honey, hops, hemp;
- Renewable biomass;
- Floriculture;
- Fruits (includes nuts) and vegetables – cold storage facilities;
- Maple sap and syrup;
- Milk, cheese, butter, yogurt;
- Eggs and meat/poultry (unprocessed);
Aquaculture;
Seed cotton;
Wool

Eligible Facilities, Equipment and Upgrades
The following types of new/used facilities and upgrades are eligible and must have a useful life for at least the term of the loan:

- Conventional cribs or bins;
- Oxygen-limiting structures and remanufactured oxygen-limiting structures;
- Flat-type storage structures;
- Electrical equipment and handling equipment, excluding the installation of electrical service to the electrical meter;
- Safety equipment, such as interior and exterior ladders and lighting;
- Equipment to improve, maintain or monitor the quality of stored grain;
- Concrete foundations, aprons, pits and pads, including site preparation, off-farm labor and material, essential to the proper operation of the grain storage and handling equipment;
- Renovation of existing farm storage facilities, under certain circumstances, if the renovation is for maintaining or replacing items;
- Grain handling and grain drying equipment determined by the Commodity Credit Corporation to be needed and essential to the proper operation of a grain storage system (with or without a loan for the storage facility);
- Structures that are bunker-type, horizontal or open silo structures, with at least two concrete walls and a concrete floor;
- Structures suitable for storing hay built according to acceptable design guidelines;
- Structures suitable for storing renewable biomass;
- Bulk tanks for storing milk or maple sap;
- Cold storage buildings, including prefabricated buildings that are suitable for eligible commodities. May also include cooling, circulating and monitoring equipment and electrical equipment, including labor and materials for installation of lights, motors and wiring integral to the proper operation of a cold storage facility; and
- Storage and handling trucks, including refrigerated trucks.
- Other equipment options are eligible, please consult with your local FSA office.

Environmental Evaluation, Financial Review and Crop Insurance
Before a FSFL is approved, the building site must have a comprehensive environmental evaluation. FSA will request a review of the applicant's farm finances, similar to that your lending institution; if approved, FSA will hold the first lien on the property purchased.

FSA will also require the applicant/farm to carry a minimum level of crop insurance for the eligible commodity(s) in question.

Finally, these loans must be approved by the local FSA state or county committee before any site preparation and/or construction can be started.

Locating Your FSA Office
If you are unsure which FSA office services your county, please visit:
the https://offices.sc.egov.usda.gov/locator/app?state=oh&agency=fsa

**Using Manure with Corn**

By: Glen Arnold  

Spring planting has been hit and miss for livestock producers in the state. Some producers have corn fields emerging while others have not yet gotten corn planted. Last fall and this past winter were not ideal for manure application. Consequently, most manure storages are close to full, and wet weather has delayed planned spring application.

I have received several calls and texts with questions related to the timing of liquid manure application to corn. The application of manure to corn can make excellent use of the available manure nutrients. Liquid manure has ammonium nitrogen which the corn crop can immediately utilize.

Incorporating manure into growing corn can boost crop yields, reduce nutrient losses, and give livestock producers or commercial manure applicators another window of time to apply manure to farm fields. Not everyone has access to manure incorporation equipment to side-dress corn. Spreading manure on the surface of corn fields can also capture most of the liquid manure nitrogen.

Surface applying liquid manure to corn fields can occur any time after the corn is planted until the corn is in the V4 (four true leaves with collars) stage. The manure will not harm the emerging corn when applied after planting. Most commercial manure applicators simply drive across the field at an angle to the planted rows. The more advanced the corn field, the more damage is likely to occur from the applicator tracks.

To use a drag hose, the field must be firm enough to support the manure hose. Spring tilled fields that were worked deeply are generally too soft to support the hose unless they were compacted by heavy rainfall. No-till and cover crop systems, where the field was not deeply tilled in the spring, generally work well.

Five years of university research has shown that surface applying manure can produce corn yields about 20 bushels per acre less than incorporated 28% Urea Ammonium Nitrate (UAN). When incorporated, the manure produced yields about 15 bushels per acre higher than the UAN. University research has also shown that corn yields are reduced by about 50 bushels per acre when flattened with a drag hose at the V5 stage.

It is important to know the nutrient content of manure if a livestock producer is counting on using the nutrients to replace commercial fertilizer. Various swine integrators use different feeding rations so a recent manure analysis is important.

Numerous livestock producers have adapted manure tankers for side-dressing manure into emerged corn by modifying rims and wheels for traveling down corn rows. Even with the soil compaction concern, corn yields from side-dressing with manure are similar to side-dressing with commercial fertilizer. Using a manure tanker also allows the corn to be taller, providing a wider window for manure application.

A YouTube video created from the 2021 Conservation Tillage and Technology virtual Conference on side-dressing corn with liquid manure can be found here: [https://www.youtube.com/watch?v=S0nhw3GG6Q8&t=14s](https://www.youtube.com/watch?v=S0nhw3GG6Q8&t=14s)
Update of Corn Nitrogen Recommendations from MRTN
By: Greg LaBarge

This article provides an updated Maximum Return to Nitrogen Rate recommendation table for corn planted after soybean. Table 1 and 2 were previously published in the 2021 CORN newsletter https://agcrops.osu.edu/newsletter/corn-newsletter/2021-39/implications-high-n-fertilizer-prices-corn-n-fertilizer. There are a couple of changes to note with these revised tables. First, due to continued concerns about nitrogen source availability, urea was added to the source list for Table 1 to provide per unit N prices. In addition, Table 2 nitrogen rate quick lookup table is updated to reflect new data in the Corn Nitrogen Rate Calculator tool. The database for soybean-corn and corn-corn rotations now includes trials through 2021.

Table 1. Price per Ton of Anhydrous and 28% UAN at Various Price per Pound of Nitrogen Fertilizer Costs (Updated 5/23/2022).

<table>
<thead>
<tr>
<th>Price of Nitrogen Fertilizer ($/lb)</th>
<th>N Source</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N Source</td>
<td>$0.65</td>
<td>$0.75</td>
<td>$0.85</td>
<td>$0.95</td>
<td>$1.05</td>
<td>$1.15</td>
</tr>
<tr>
<td>82-0-0</td>
<td>$1066</td>
<td>$1230</td>
<td>$1394</td>
<td>$1558</td>
<td>$1722</td>
<td>$1886</td>
</tr>
<tr>
<td>28-0-0</td>
<td>$364</td>
<td>$420</td>
<td>$476</td>
<td>$532</td>
<td>$588</td>
<td>$644</td>
</tr>
<tr>
<td>45-0-0</td>
<td>$585</td>
<td>$675</td>
<td>$765</td>
<td>$855</td>
<td>$945</td>
<td>$1035</td>
</tr>
</tbody>
</table>

Table 2. Ohio MRTN recommended Nitrogen Rates (lbs nitrogen/acre) for Corn following Soybean based on the Price of Corn Grain and Nitrogen Fertilizer (Updated 5/23/2022).

<table>
<thead>
<tr>
<th>Price/Bushel Corn</th>
<th>Price of Nitrogen Fertilizer ($/lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5.50</td>
<td>$0.65</td>
</tr>
<tr>
<td></td>
<td>173</td>
</tr>
<tr>
<td>$6.00</td>
<td>178</td>
</tr>
<tr>
<td>$6.50</td>
<td>182</td>
</tr>
<tr>
<td>$7.00</td>
<td>185</td>
</tr>
<tr>
<td>$7.50</td>
<td>189</td>
</tr>
</tbody>
</table>

If you have corn planted after corn or specific price scenarios for your farm, we encourage you to visit Corn Nitrogen Rate Calculator (CNRC) web tool. You can find CRNC at http://cnrc.agron.iastate.edu/. If you need a brief introduction to CNRC, see https://agcrops.osu.edu/newsletter/corn-newsletter/2022-05/using-corn-nitrogen-rate-calculator.

Soybean Planting Progress and Vegetative Growth
By: Laura Lindsey

Cool, wet weather in April and early May delayed soybean planting progress; however, with some warmer and drier days, soybean planting was 18% complete by the second week of May (Table 1). Soybeans that were planted the end of April or first week of May are likely at the VC growth stage or will be at the VC growth stage soon (Figure 1).
Table 1. Percent soybean acres planted in Ohio by week for the past five years (USDA NASS).

<table>
<thead>
<tr>
<th>Week</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd Week of April</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>3rd Week of April</td>
<td>0%</td>
<td>8%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>4th Week of April</td>
<td>2%</td>
<td>17%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>1st Week of May</td>
<td>4%</td>
<td>20%</td>
<td>7%</td>
<td>1%</td>
<td>8%</td>
</tr>
<tr>
<td>2nd Week of May</td>
<td>18%</td>
<td>29%</td>
<td>24%</td>
<td>2%</td>
<td>31%</td>
</tr>
</tbody>
</table>

What does the soybean crop need to maximize yield during vegetative growth? During vegetative growth, green plants use the energy in sunlight to power photosynthesis. This process uses water, carbon dioxide from the air and light energy to produce sugars. Sugars are then converted into plant dry matter. Chlorophyll in green leaves, stems and pods gathers light for photosynthesis. During vegetative growth, plant dry matter distributed to leaves, stems and roots enables the plant to “build the factory” for producing seed later in the season.

Figure 1. Soybean at the VC growth stage (unifoliolate leaves unrolled sufficiently so the leaf edges are not touching). (Photo: Alex Lindsey)

The amount and distribution of leaf area together make up the canopy, and canopy cover increases as leaf area increases. Leaf area is measured as the leaf area index (LAI) or the acres of leaf area per acre of crop. Because leaves aren’t uniformly distributed, and because some light passes through a leaf without being intercepted, LAI may need to reach 5 or 6 before the crop intercepts nearly all of the sunlight. Light interception, canopy photosynthesis, and crop growth rates increase as the canopy develops, with light interception increasing from less than 1% of the amount of sunlight that falls on an acre as plants emerge, to nearly 100% during pod filling. An early start and rapid pace of canopy development means more rapid increases in crop growth rate, which sets the stage for higher yields.

<table>
<thead>
<tr>
<th>Misconception</th>
<th>Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very early planting often means that cool temperatures limit early growth,</td>
<td>Once the reserves in the cotyledons are used up, growth requires light</td>
</tr>
<tr>
<td>but plants can still grow their root system even if leaves don’t grow very</td>
<td>interception by leaves and air temperatures above 55-60°F; without this, no</td>
</tr>
<tr>
<td>much.</td>
<td>part of the plant will show much growth.</td>
</tr>
<tr>
<td>Leaf area needs to develop rapidly from the beginning, and all of the leaf</td>
<td>Vegetative development takes place over more than half of the soybean</td>
</tr>
<tr>
<td>area the plant develops needs to stay healthy for yields to be high.</td>
<td>growing season, so leaf area lost early can often be recovered as growth</td>
</tr>
<tr>
<td></td>
<td>continues with no loss in yield.</td>
</tr>
<tr>
<td>Leaves should be dark green, and any pale green or other off-colors that</td>
<td>Low temperatures and cold soils alone can cause poor leaf color. Small</td>
</tr>
<tr>
<td>appear in young plants signal yield losses to come. Tissue sampling can</td>
<td>plants have small root systems and acquire nutrients slowly, with few</td>
</tr>
<tr>
<td>detect specific nutrient deficiencies, and these should be corrected as</td>
<td>exceptions (i.e., iron chlorosis, caused by high pH). Poor plant color</td>
</tr>
<tr>
<td>soon as possible.</td>
<td>usually corrects quickly once temperatures increase with no loss in yield.</td>
</tr>
</tbody>
</table>

Misconceptions at the VC-V3 growth stage: There are several common misconceptions about soybean plants at the VC to V3 growth stage. For more information on soybean vegetative growth, see this Science for Success video featuring my colleague Dr. Manni Singh from Michigan State University: https://www.youtube.com/watch?v=2aBnTLoZKQ and also this Science for Success FactSheet: https://soybeanresearchinfo.com/wp-content/uploads/2022/01/Science-for-Success-Soybean-Growth-Stages-V3.pdf
Export Policies and Russia's Invasion of Ukraine: What Might it Mean for Ohio Soybean Farmers?

by: Ian Sheldon, Professor and Andersons Chair of Agricultural Marketing, Trade, and Policy, Agricultural, Environmental, and Development Economics, Ohio State University and Chris Zoller, Associate Professor and Extension Educator, Agriculture & Natural Resources, Ohio State University Extension – Tuscarawas County

Use of Commodity Export Policies
With Russia and Ukraine alone accounting for 12 percent of total calories traded (IFPRI, April 13, 2022), continuation of the war has intensified the vulnerability of developing countries to food insecurity, the G7 countries recently predicting 43 million people were being pushed towards famine (The Guardian, May 14, 2022). The impact of Russia’s invasion of Ukraine on exports from the Black Sea region of staple foods such as wheat, corn, and vegetable oils, has had a significant impact on world food prices, adding to the impact of supply chain disruption due to the pandemic, and drought-reduced yields in 2021. The UN Food and Agriculture Organization (FAO) reports that its food price index stood at 158 points this April, 30 percent higher than in April 2021, and its highest level since 1990, (UN/FAO, April 2022).

Like past food price crises, notably the grain price spikes in 2007-2008 and 2010-2011, many countries are responding to higher food prices and shortages with restrictions on exports of key commodities. As of April 2022, 16 countries had imposed export restrictions, including Ukraine, Russia, Indonesia, Argentina, Turkey, Kyrgyzstan, and Kazakhstan, affecting about 17 percent of total calories traded, the key commodities being wheat, palm oil, corn, sunflower oil, and soybean oil, affecting 36, 55, 17, 78, and 6 percent of their exports respectively (IFPRI, April 13, 2022). As is already the case with the announcement of proposed ban on all Indian wheat exports (Bloomberg, May 13, 2022), more countries are likely to respond to increasing food prices in this way. Unfortunately, this has the potential of creating a “collective action” problem, i.e., countries have a unilateral incentive to reduce domestic food prices by using export restrictions, but if enough countries implement such policies, it simply exacerbates the rise in global food prices. At the same time, the World Trade Organization (WTO) lacks an effective means to discipline use of such “beggar thy neighbor” policies.

The Case of Vegetable Oils
Prior to Russia’s invasion of Ukraine, between them the two countries accounted for 73 percent of global exports of sunflower oil. By late-April, there had been a 25 percent reduction in traded sunflower oil, and there is also uncertainty about how much sunflower seed has been planted in Ukraine this spring (New York Times, April 30, 2022). Even though sunflower oil accounts for only 9 and 12 percent of global vegetable oils production and consumption respectively (USDA, April 12, 2022), the global price of vegetable oils has already risen to an all-time high this year (Financial Times, May 9, 2022), with canola, palm oil, sunflower oil, and soybean oil prices rising by 72, 61, 44, and 41 percent respectively in the past year (Wall Street Journal, April 7, 2022). Not surprisingly, with limited stocks and rising prices, vegetable oils are even being rationed to consumers by major grocery retail chains in developed countries such as Belgium, Spain, and the United Kingdom (New York Times, April 30, 2022).

The rise in vegetable oil prices has also been exacerbated by Indonesia recently banning exports of palm oil to protect its domestic consumers (Reuters, April 22). The expected global impact of the ban is not surprising given Indonesia accounts for 59 percent of global palm oil production, palm oil accounting for 35 and 33 percent of global vegetable oil production and consumption respectively (USDA, April 12, 2022). Add to this the fact that substitutes such as soybean oil and canola are not readily available due to recent drought conditions in Argentina, Brazil, and Canada (Reuters, April 23, 2022), which is putting further pressure on vegetable oil prices. For example, soybean oil prices on the Chicago Board of Trade had risen by almost 50 percent by end of April this year (Reuters, April 22, 2022).

Implications for U.S. and Ohio Soybean Farmers
The Russian invasion of Ukraine has driven home a fact we have always known – agriculture operates in a global environment. Access to export markets is critical to U.S. agriculture, especially for soybeans, the
number one export for U.S. agriculture. According to the USDA Foreign Agriculture Service (FAS), in 2020, U.S. soybean exports to the world reached a record $25.7 billion in value.

WASDE Report
The May 2022 World Agricultural Supply and Demand Estimate (WASDE), available here: https://www.usda.gov/oce/commodity/wasde/wasde0522.pdf changed its soybean outlook, including raising the 2022/2023 average price from $13.25 per bushel to $14.40 per bushel. A projected increase in U.S. soybean production will result in an increase of 6.1 million tons of oilseed production compared to 2021/2022. WASDE also forecast global soybean production to increase, with Brazil representing more than one-half of the increase. The Brazilian soybean crop is expected to be a record 149 million tons, with Argentina adding another 51 million tons. As is the case in the U.S., weather can have a significant impact on soybean production in South America.

Double-Crop Possibility
It is difficult to think about planning the 2023 crop when we are behind schedule getting this year’s seeds in the ground, and much can and will change between now and the 2023 planting season. However, you may want to consider an analysis conducted by the University of Illinois examining production and profitability from double-crop soybeans. The article is available here: https://farmdocdaily.illinois.edu/wp-content/uploads/2022/05/fdd051722.pdf. We provide a summary below.

The authors of the article evaluate a wheat-double-crop-soybean rotation for 2023 and find this production practice to be more profitable than growing either corn or soybeans, especially in southern Illinois. The authors note that in the long-run, yield increases are necessary before there will be widespread adoption of this production practice. Much of the projected profitability is related to higher prices because of the war in Ukraine. In addition, more acres planted to wheat would likely drive down its price.

The authors note that these technological advances may be useful:
- Development of wheat varieties that could be harvested earlier.
- Higher yielding wheat varieties.
- Double-crop soybean varieties with higher yield potential.
- If interested in reading more of the specifics of this analysis, click the link above.

Moving Forward
There are several uncertainties related to soybean prices, including how long the war continues, weather, production, demand, fertilizer price, etc., that are out of your control. We encourage you to manage what you can control and consider the following:
- How might global events impact your business
- Know your cost of production.
- Develop budget scenarios. As of this writing, soybean futures for November 2023 closed at just over $14.00 per bushel.
- Utilize OSU Extension Crop Enterprise Budgets: https://farmoffice.osu.edu/farm-management/enterprise-budgets#2022
- Talk with your agronomist, Extension Educator, lender, and other advisors.

Market Outlook Report: Wheat
By: Chris Zoller, Extension Educator, ANR, Tuscarawas County
Source: https://u.osu.edu/ohioagmanager/2022/05/20/market-outlook-report-wheat/

The United States Department of Agriculture Economic Research Service (USDA ERS) released its Wheat Outlook on May 16, 2022. This report provides domestic and international estimates and projections and is available here: https://www.ers.usda.gov/webdocs/outlooks/103927/whs-22e.pdf?v=1249. The outlook is based on the World Agricultural Supply and Demand Estimate (WASDE) released May 12, 2022. This article will provide a summary of the estimates for domestic supplies, production, and pricing.
Tight Supplies & Record Prices
The season-average price for wheat in the 2022/2023 marketing year is projected to be $10.75 per bushel. Drought in several wheat producing regions of the U.S. resulted in lower production in the 2021/2022 marketing year leading to tight stocks. USDA ERS projects an increase in wheat acres for the 2022/2023 marketing year but still expected to be the lowest in 20 years.

Domestic Outlook
The latest Crop Production Report from USDA National Agricultural Statistics Service indicated that, although acres planted to wheat increased, harvested acres are expected to decline by four percent. Average yield is expected to decline more than two bushels per acre to an average of 47.9 bushels per acre.

Production of Hard Red Winter wheat is expected to be down 21 percent. Persistent drought in major production regions (Kansas, Texas, and Oklahoma) is to blame for much of the decline.

Soft Red Winter wheat is expected to decline by approximately two percent from the previous year. While down, the production is still the largest since the 2015/2016 marketing year.

Production of White Winter wheat, grown primarily in the Pacific Northwest, is projected to be up 38 percent from the prior marketing year. A total of 230 million bushels is expected.

The outlook projects a total of 555 million bushels of Durum and other Spring wheats. Arizona and California are significant producers of these classes of wheat.

Winter Wheat Yield Forecast & Conditions
Production in Central and Eastern States is expected to be down compared to last year. See the figure to the right.

The figure below shows the percent of wheat rated good to excellent, as of May 8, 2022. The largest reductions in yield are from the major Hard Red Winter wheat producing regions, including Kansas, Oklahoma, and Texas.

According to the May 10 Drought Monitor from USDA, 68 percent of the U.S. winter wheat is in areas experiencing drought.
Wheat Pricing
The graph below shows pricing for Hard Red Winter and Hard Red Spring wheat from August 2020 to April 2022. The most recent OSU Extension Enterprise Wheat Budget for 2023 estimates wheat at $10.65 per bushel.

Planning for 2023
Russia and Ukraine account for approximately 30 percent of world wheat exports. Wheat is receiving greater interest because of the uncertainties of harvest and export potential. The University of Illinois Farmdoc program published a paper recently analyzing a wheat-double-crop-soybeans rotation and found it to be more profitable that corn or soybeans alone. The analysis is available here: [https://farmdocdaily.illinois.edu/2022/05/production-from-double-crop-soybean-rotations.html](https://farmdocdaily.illinois.edu/2022/05/production-from-double-crop-soybean-rotations.html).

Planting wheat this year may be an option on your farm. I encourage you to stay informed of the ever-changing geopolitical environment and its potential impacts on your farm management decisions. Speak with your agronomist, Extension Educator, and other trusted advisors as you develop plans and evaluate options.

Tenant’s Right to Buy Land at Landowner’s Death
By Robert Moore, Attorney and Research Specialist, OSU Agricultural & Resource Law Program
Source: [https://farmoffice.osu.edu/blog/fri-05202022-600pm/tenant%E2%80%99s-right-buy-land-landowner%E2%80%99s-death](https://farmoffice.osu.edu/blog/fri-05202022-600pm/tenant%E2%80%99s-right-buy-land-landowner%E2%80%99s-death)

The relationship between farmland owner and tenant often goes beyond just a business transaction. It is common for the tenant to lease the same farmland for many years or for the tenant/landowner relationship to span several generations. The relationship between the parties may evolve into one of great trust and respect – the landowner knowing that the tenant will treat the land like their own and the tenant knowing the landlord will always be fair with them.

Sometimes, when the landowner knows that their heirs do not have interest in owning the land, they will promise to give the tenant the first chance to buy the farm at landowner’s death. Tenants will always appreciate this gesture so that they do not have to outbid their neighbors at a public auction when the landowner dies. However, a mere promise is not enough. To protect the tenant’s right to purchase the farm, the landowner must take proactive measures.

Under Ohio law, and every other state, verbal promises regarding real estate are rarely enforceable. Because real estate is such an important asset, courts do not want to have to guess as to what a buyer and seller may have agreed upon. So, in most situations, if it is not in writing, a court will not enforce verbal promises.
regarding real estate.

Example. Landowner has leased her land to Tenant for 25 years and verbally promised that when she dies Tenant will get to buy her farm. Upon her death, her heirs do not want to sell to Tenant because they think they will get more at auction. Because Landlord’s promise was only verbal, the heirs can ignore Tenant and sell at auction.

So, what can be done to ensure that a landlord’s desire for a tenant to buy the farm is enforceable? The following are options available to Landlord and Tenant.

**Will or Trust**
The landlord can include a provision in their will or trust giving the tenant the right to buy the farm. Upon landlord’s death, the trustee or executor will be obligated to sell the land to the tenant. This is an easy solution to give the tenant a chance to buy the farm. However, it is not a perfect solution.

Wills and trusts can be changed at any time. The tenant has no guarantee that a landlord will not change their will or trust and remove the purchase provision. For as long as the landowner has mental capacity, they can change their will or trust anytime they wish. So, while putting the purchase option in the will or trust is better than a verbal promise, it is not a guarantee the tenant will have a chance to buy the farm.

Practice Pointer. When giving a tenant the right to purchase a farm, consider also providing them with a small amount of money from the estate/trust. By giving them even $100, the tenant becomes a beneficiary of the estate/trust and is entitled to be informed of all aspects of the administration. There could be some dispute as to whether the tenant is a beneficiary of the estate/trust if they only have purchase rights. A beneficiary of an estate/trust has certain rights that a mere buyer would not have.

**Right of First Refusal**
For the tenant, a better strategy may be to enter into a Right of First Refusal (ROFR) with the landowner. A ROFR is an agreement that gives the tenant the chance to buy land at the landowner’s death or before the landowner can transfer it. The ROFR includes a provision that makes it binding upon the landowner and their heirs so that the ROFR survives the landowner’s death. Upon the landowner’s death and before the land can be transferred to heirs, the ROFR is triggered and tenant can decide if they wish to buy the land. The ROFR should be signed by both parties, notarized and recorded.

Example. Landowner wants to ensure that Tenant has a chance to buy her farm when she passes away. Landowner and Tenant execute a ROFR that states upon Landowner’s death, Tenant will have a chance to buy the land at appraised value. The ROFR is made binding upon the Landowner’s heirs and recorded. When Landowner dies, the purchase provision in the ROFR will be triggered and Tenant will have an opportunity to buy the land.

The disadvantage of the ROFR for the landowner is that it cannot be changed. The ROFR is a contract and once signed cannot be changed without the tenant’s consent. If the landowner wants to keep the option to change their mind regarding the sale of the farm, they should not enter into a ROFR but opt for the will/trust strategy instead.

**Purchase Terms**
Regardless of which of the aforementioned strategies are used, time and effort should be spent specifying the purchase terms. The will/trust or ROFR should include specific language addressing the following:

- **Identify the Property.** Use parcel numbers, legal descriptions, FSA farm numbers and/or acreage to specify what land is being offered for sale. Do not leave any room for misunderstandings of what land is being offered to the tenant. Avoid using only farm names to identify (i.e. “Smith Farm”).
Purchase Price. Clearly state how the purchase price is determined. If by appraisal, consider using a licensed, certified appraiser to avoid any perception that the appraiser favors one party or the other. Also consider including a three-step appraisal process allowing either party to get their own appraisal if they dispute the original appraisal. A flat price can be used for the purchase price but the parties risk the flat price not adjusting to market conditions. The landowner may also include a discount % on the purchase price to help the tenant.

Deadlines. The purchase terms should give the tenant a specific number of days to decide if they want to purchase the farm. This term should begin to run after the purchase price has been established. The tenant should be required to exercise their purchase option by giving written notice to the estate/trust. A closing date should also be set, usually a specific number of days after the tenant has provided the written notice to purchase.

Other Purchase Terms. Include any other purchase terms like title insurance and transaction costs.

Summary
Landowners and tenants should not rely on verbal promises for the purchase of the farm at landowner’s death. Using either a will/trust or ROFR can ensure that a tenant will have a legally enforceable right to purchase the farm. When drafting the will/trust or ROFR, include specific purchase terms to avoid conflict between the tenant and the landowner’s heirs. The parties should seek legal counsel to assist in drafting the documents to be sure that all legal requirements are met.

Memorial Day- Looking at the Dash

By: David L Marrison, OSU Extension Educator-Coshocton County
Written for Publication on May 26, 2022- The Beacon Newspaper

Hello Coshocton County! On Monday, we will celebrate Memorial Day honoring those who died serving in the United States military. Originally known as Decoration Day, it originated in the years following the Civil War and became an official federal holiday in 1971.

I know many of us will observe Memorial Day by visiting cemeteries or memorials, holding family gatherings, and participating in parades. This week our family visited the historic Gettysburg battlefield in Pennsylvania. What a sobering experience to learn more about the Civil War which claimed more lives than any conflict in U.S. history.

I appreciate Memorial Day weekend as it allows us to remember those who gave the ultimate sacrifice in protecting the liberties of the United States. Many of our local families have a deep history of family members leaving the farm to serve their country. Honor, country, agriculture, family, and faith are cornerstone principles for many farm families.

Since I was a young child, I have helped my mom’s 4-H club plant geraniums on the graves of the men and women in my home township as a small token of remembrance and appreciation. During this time, I also reflect on a field trip that my junior high school English teacher, Ms. Schaefer took us on to a local cemetery to do etchings of some of the Veteran’s tombstones.

One question she asked us during this experience was what was the most important item on a headstone? Our class was quick to respond the person’s name or how long they lived. Most of us were confused when she said, “No, the dash is the most important part.” It took years for this simple lesson to sink in. That it matters little what your last name is or the length of your life here on Earth but rather the quality and character of the life that you put into your dash. I hope this Memorial Day is a chance for all of us to consider our mortality, legacy and what our “dash” will be.
In my role in OSU Extension, I have the opportunity to work with farm families as they plan for the future of their farm and how to pass their legacy. Conversations about death especially our own mortality are difficult. However, I would contend these conversations could be some of the most loving and thoughtful discussions which families can have.

Our challenge is to complete a succession and estate plan which allows for a smooth transition once we are gone. One of the hypothetical questions we pose in our workshops is “What knowledge would you need to pass on if you knew you had only 2 months to live?” This exact scenario happened to our family twelve years ago when my father was diagnosed with pancreatic cancer. I challenge you to think how your farm and family would react to the loss to a primary operator or partner. What knowledge and skills need to be transferred so they can be successful without you?

As you plan there are a myriad of decisions to be made. One of the most difficult is determining how to be fair to off-farm heirs without jeopardizing the future of the heirs who have remained with the family business. Other decisions include deciding who will manage the business in the future, how to distribute assets, and how the business will deal with unexpected issues such as divorce, disability, family discord, or paying for nursing home expenses.

Another act of love is to compile a listing of your financial and farm documents. In our Extension workshops, we share a writeable PDF document titled “Getting Your Farm and Family Affairs in Order.” This document allows families to summarize their assets and how each is owned, valued, and titled. Having all of these documents together will save you money as you meet with your attorney and is sure to make the settling of your estate less of a burden on your spouse and family members.

So, Coshocton County, this Memorial Day I urge you to consider what your dash will represent. What can you do today to create a better tomorrow? And remember some wise advice from Chuck Palahniuk who stated “We all die. The goal isn't to live forever, the goal is to create something that will.” Have a good and safe day!

**Victory Garden Seeds Distribution**

OSU Extension in Coshocton County and the Coshocton County Master Gardener Volunteers are once again participating in the state of Ohio’s Victory Garden seed distribution. Coshocton County is one of 42 counties across Ohio selected to be part of this distribution. Coshocton County was allocated 500 packets of seeds to distribute to our community. Each of these packets contain lettuce, carrots, cucumber, and sunflower.

Victory Gardens originated during World War I as an answer to a severe food shortage at the time. The idea was wildly successful, growing an army of amateur gardeners and serving to boost morale and patriotism across our Country. Although there’s no food shortage now, ODA and OSU Extension are reviving the effort to once again encourage people to plant seeds, realize the fruits of their labor, and share with others if inspired.

The victory garden seed packets are now available at the Extension Office located in Room 110 at 724 South 7th Street in Coshocton. These packets are being distributed on a first come, first served basis. The Extension office is open Monday through Friday from 8:00 a.m. to 12 noon and from 1:00 to 5:00 p.m. Along with the seed packets, you will also receive a packet of Extension factsheets which will assist you as you grow your lettuce, cucumbers, carrots, and sunflowers.
“Name that Tree” Workshop Slated for June 29

Have a tree that you pass on a regular basis that you always wonder ‘what is that?’ Or do you own a woodland and want to know exactly what trees you have? If so, OSU Extension and Clary Gardens will be hosting a “Name that Tree Program” on Wednesday, June 29 from 10:00 to 3:00 p.m. at Clary Gardens located at 588 West Chestnut Street in Coshocton, Ohio. This one-day workshop is designed to give participants in-depth training and practice on identifying trees using leaves and other common characteristics. The class begins in a new outdoor event pavilion with some introductory identification clues and samples that we use to work through a dichotomous key. The afternoon is spent out in the woods practicing (expect moderate walking). The registration fee for this program is $40 per person. This registration fee includes the program, light refreshments, lunch, and handouts. There is limited seating so pre-registration is due by June 21. For more information about this program, contact the Coshocton County Extension office at 740-622-2265.

Eastern Ohio Grazing Council Pasture Walks

By: Beth Kruprzak, District Conservationist, United States Department of Agriculture
Source: https://u.osu.edu/sheep/2022/05/17/eastern-ohio-grazing-council-pasture-walks/#more-5149

The Eastern Ohio Grazing Council will host a Grazing Workshop on Thursday, May 26, 2022 at 6:00 pm at Cottage Hill Farms located at 35525 Cadiz-Piedmont Road, Cadiz, Ohio 43907.

Found in 1816 by Robert Moore, Cottage Hill Farm is currently operated by 3 generations of the Moore family. Rick Moore, along with his father, Stanley, and son, Steven, raise sheep for meat production and sell high-quality wool from their Merino sheep bloodlines.

Topics:
Alternative Parasite Management Practices – Dr. Braden Campbell, OSU
Predator Management – Stuart Heavilin, Harrison SWCD
Adding Small Ruminants to Your Operation – Clint Finney, NRCS

Registration is required. Please contact Carroll SWCD at 330-627-9852 to register.

Upcoming events:
Pasture Walk – Columbiana County – 6/23/2022 at 6:00 pm
Pasture Walk – Tuscarawas County – 7/28/2022 at 6:00 pm

Our pasture walks are normally held on the 4th Thursday of the month April through October on various farms throughout Carroll, Columbiana, Harrison, Jefferson, Stark, and Tuscarawas Counties. In January, February, and March we host winter workshops. Anyone interested in the conservation of our soil and water through growing and grazing forages is encouraged to attend the monthly meetings. The Eastern Ohio Grazing Council strives to promote the conservation of our soil and water by growing and grazing forage and serve as advocates for sustainable and environmentally sound grazing practices. If you would like to attend any of the 2022 event you can contact the Carroll SWCD office at 330-627-9852 to be placed on the mailing list. Contact Beth at beth.kruprzak@usda.gov to be added to the email list.

Thanks to our sponsors: Byron Seeds, Carrollton Farmers Exchange, Circle L Fence LTD., Diamond T Fencing, FK Agronomics, Farm Credit Mid-America, Kim Davis Insurance Agency, Muskingum Watershed Conservancy District, and Straight A’s Ranch Supply.

Check out the Eastern Ohio Grazing Council on Facebook at: https://www.facebook.com/EasternOhioGrazingCouncil
OSU EXTENSION - WAYNE COUNTY PRESENTS

Small Grains Field Day

Attention all Small Grain Producers. Are you interested in learning more about wheat cultivars, updates on grain variety trials, disease and insect management, barley for brewing and how to identify wheat quality? Please join us!

This event is free to attend thanks to the generosity of the Ohio Corn and Wheat Board. Lunch will be provided.

RSVP is required for lunch orders by June 7.

REGISTER: go.osu.edu/small-grains-field-day or call 330-264-8722

DATE: June 14, 2022

TIME: 8:30AM-2:30PM

LOCATION: OSU Schaffter and Snyder Farms
3230 Oil City Rd.
Wooster, OH 44691

EVENT SPONSOR:
Ohio Corn and Wheat

Topics Include:
- Wheat Cultivars
- Small Grain Variety Trial Updates
- Seeding Rates
- Small Grain Disease and Insect Management
- Barley for Brewing
- Wheat Quality
2022 Ohio Beef Day and Tour

Saturday July 16 9:00 a.m. – 2:30 p.m.

Muskingum County
Self Driving Tour

Agenda

8:00 a.m. Registration Opens - Donuts
Muskingum Livestock
944 Malinda St. Zanesville, OH 43701

8:50 a.m. Welcome and Tour Instructions
Garth Ruff, OSU Extension Beef Cattle Field Specialist

9:00 a.m. Depart for Tour in Own Vehicles – Stops in Order

- Michel Livestock
  Starting and Receiving Feedlot Cattle
- Shirer Bros Meats
  Local Meats Q&A
  Peggy Hall, OSU Extension Ag Law Specialist
- Hatfield Farms
  Fencing, Fall Calving, and Farm Succession

12:30 p.m. Lunch at Roger’s Auction Barn
Prepared by Muskingum Co. Cattlemen’s Association

Lunch

Beef Industry Update
Ohio Cattlemen’s Association/Ohio Beef Council

1:15 Herd Health – Vaccinations and Anaplasmosis
Dr. Justin Kieffer, DVM OSU Clinical Veterinarian

2:00 Beef Quality Assurance Wrap up
Clifton Martin, OSU Extension Muskingum County

2:30 Adjourn
Please complete program survey and have a safe trip home!

PROGRAM DETAILS

$10 per person

Register by July 7, 2022 at:
go.osu.edu/2022beefday

Registration fee includes:
- Refreshments
- Lunch
- Resources

Education Credits Offered
Beef Quality Assurance Certification (BQA)

Contacts:
Garth Ruff, OSU Extension
ruff.72@osu.edu
740-305-3201

Clifton Martin, OSU Extension
martin.2422@osu.edu
740-454-0144
Have a tree that you pass on a regular basis that you always wonder ‘what is that? Own a woodland and want to know exactly what trees you have? Then this Name That Tree Workshop is for you! This one-day workshop is designed to give participants in-depth training and practice on identifying trees using leaves and other common characteristics. The class begins in a new outdoor event pavilion with some introductory identification clues and samples that we use to work through a dichotomous key. The afternoon is spent out in the woods practicing (expect moderate walking). This workshop is being co-hosted by OSU Extension and Clary Gardens.

REGISTRATION INFORMATION: The registration fee of $40 includes the program, light refreshments, lunch, and handouts. There is limited seating so pre-registration is due by June 21.

Name(s)____________________________________
Address_________________________________________________
Email________________________Phone__________________

$40 per person registration ____# of attendees @ $40 each

Please make checks payable to OSU Extension and mail to OSU Extension, 724 South 7th Street, Room 110, Coshocton, Ohio 43812. For more information, call 740-622-2265.