2022 WEED UNIVERSITY...sponsored by OSU Extension will be held from 9am-4pm on February 2 at Roscoe Village in Coshocton. Are you concerned about palmer amaranth? Did you know that palmer amaranth, waterhemp and other invasive weeds can now be found in most Ohio Counties? One female palmer amaranth plant can produce 1 million seeds. I have it ... now how do I control it? How did I get it, how is it spread? These issues will be discussed at the 2022 Ohio Weed University.

This high-impact program is designed for producers wanting to be on the “Cutting Edge” of crop production for their operations. Topics Include: Local Weed Populations and Late Season Weed Issues; Hot Topics in Weed Control; Weed Biology and Control Strategies; Cover Crop Management in Forages; and Evaluating Your Herbicide Program. Hands-on activities include Weed identification utilizing live plants at various growth stages; Nozzle selection and calibration utilizing a spray table; and Tank mixing order for different products. Featured Ohio State University speakers include Dr. Mark Loux, Alyssa Essman and various Extension Educators.

Registration information can be found at https://u.osu.edu/knoxcountyag/2022/01/03/ohio-weed-university/.

ADDITIONAL WEED CONTROL INFORMATION...is available from the Take Action podcasts and webinars. Given how messed up the whole herbicide supply and price thing is right now, it might be a good time to take advantage of free resources to improve your herbicide and weed management acumen. The USB Take Action program and university weed scientists are once again conducting a series of webinars to cover several key topics in weed management. Three webinars occur this month and will be followed by the release of videos covering other pertinent weed-related subjects. January webinars include the following:
Why Care about Metabolic Herbicide Resistance – Thursday, January 13, 11 am EST
Value of Residuals in Herbicide-Resistant Weed Problems – Thursday, January 20, 11 am EST
Harvest Weed Seed Control Practices – Thursday, January 27, 11 am EST

Registration information can be found here. Videos of the webinars will be made available following their broadcast.

Another great resource is the “War Against Weeds” podcast. This podcast features guests with expertise in a variety of aspects of weed science, and discussions on integrated weed management, herbicide resistance, and other timely topics. The podcast is hosted by Sarah Lancaster, Kansas State Extension Weed Science Specialist, Mandy Bish, Extension Weed Scientist at the University of Missouri, and Joe Ikley, Extension Weed Scientist at North Dakota State. Podcast episodes are available at https://waragainstweeds.libsyn.com/ and on Spotify, iTunes, and Google Podcasts.


A NEW YEAR & AN UPDATED BALANCE SHEET...many of us make New Year’s resolutions as we turn the corner to a new calendar year. One of the best financial management resolutions you can make is to update your balance sheet in a timely and precise fashion. The balance sheet is a “snapshot” in time of your farm’s financial position, including what assets you own and how they are financed. The balance sheet is also known as the net worth statement. When completed precisely and timely, the balance sheet and corresponding ratios can be a very valuable tool to determine farm financial health. The balance sheet objectively measures farm business growth, liquidity, solvency, and risk capacity.

Categorizing Balance Sheet Items
The assets and liabilities on the balance sheet (including the financing of the assets) are used to determine the equity, or net worth, of the farm owner. The owner’s equity is used by lenders and insurers to determine a farm business’ value. There are two ways to calculate the owner’s equity, or net worth. The first simply subtracts the liabilities from the assets:

Assets – Liabilities = Owner’s Equity

The second calculation adds the owner’s equity with liabilities to determine the assets:

Liabilities + Owner’s Equity = Assets

Terms of Assets and Liabilities
Beyond the broad categories of either an asset or liability, a balance sheet categorizes items into “time compartments” or terms of useful life. Useful life is a term for the amount of time an item can be utilized for the farm business. Depreciation allocates the cost of this asset over its useful life. Both assets and liabilities can be categorized into current, intermediate, and long, or fixed, terms of useful life.
**Assets** – Current assets can be converted to cash in one year or less. Common current assets are cash, growing crops, harvested crop inventory, market livestock, accounts receivable, and other similar items. Intermediate assets have an assumed useful life or depreciable value of one to ten years. Common intermediate assets are breeding livestock, machinery and equipment, titled vehicles, and not-ready-marketable bonds and securities. Long term, or fixed, assets are typically permanent items with value—depreciable or not—for more than ten years and include farmland, buildings, farmsteads, and other similar items.

**Liabilities** – Current liabilities are obligations that are due and payable in the next twelve months. Most common current liabilities include accounts payable (bills), credit card bills, operating lines of credit, accrued interest, and the current portion of principal on loans due this year. Intermediate liabilities are obligations that due to be paid back within one to ten years and are usually associated with intermediate farm assets on the left side of the balance sheet. Common intermediate liabilities are the principal remaining on machinery and equipment loans or breeding livestock purchases. Finally, long term, or fixed, liabilities are debts with terms greater than ten years like the principal balance remaining on a farmland or building mortgage.

**Assets: Market Value vs. Cost Value**

*Market value* – Today’s market values minus selling costs are used to determine market value. For example, a fully depreciated 15-year-old tractor certainly has a current market value greater than zero, especially in today’s environment. A realistic current market value for this tractor can be obtained with an appraisal, or by looking at current sales of similar tractors online. Similarly, farmland bought 30 years ago likely has a different current market value today. In general, lenders may prefer the use of current market values in a balance sheet for asset valuation.

*Cost value* – The net book value, or the cost of the item minus accumulated depreciation, is the cost value. For example, a fully depreciated 15-year-old tractor has a cost value of $0 in a cost-based balance sheet. No appraisal is needed; only record the cost minus accumulated depreciation. Farmland (a non-depreciable, long-term asset) purchased 30 years ago has a balance sheet value of the purchase cost. In general, accountants prefer cost value balance sheets as a clearer reflection of business success, based on business decisions rather than inflation, depreciation, or appreciation of investments.

In a precisely completed balance sheet, the cost value and the market value columns usually produce different total asset values.

**Keys to Completing the Balance Sheet**

Several keys can help farmer improve their accuracy, effectiveness, and efficiency for completing year-end balance sheets.

- Complete the balance sheet on the same date each year, usually as of December 31st. The information will never be more accurate than immediately after the end of the year.
- Items like investment/retirement account balances or principal loan balances make take several weeks to arrive unless you use online accounts; nevertheless, December 31st is the reference date you should use.
- Inventory all assets, including standard weight and measure units (i.e... Lbs., head, bushels, bales, etc).
- Utilize current market prices for crop and livestock inventories.
- Calculate cost value for growing crops.
- Include government payments and insurance indemnities yet to be received in accounts receivable.
- Apply conservative breeding livestock values, avoiding large year-to-year changes.
- Maintain a separate, easy-to-update depreciation schedule for depreciable assets like equipment.

(Source: OSU Extension Ohio Ag Manager: https://u.osu.edu/ohioagmanager/2022/01/04/a-new-yearan-updated-farm-balance-sheet/)

2022 OHIO FARM CUSTOM RATE…survey responses are requested. The Ohio Farm Custom Rates Survey data collection has launched once again. The online survey for 2022 is available at: https://go.osu.edu/ohiofarmcustomratesurvey2022

Many Ohio farmers hire machinery operations and other farm related work to be completed by others. This is often due to lack of proper equipment, lack of time or lack of expertise for a particular operation. Many farm business owners do not own equipment for every possible job that they may encounter in the course of operating a farm and may, instead of purchasing the equipment needed, seek out someone with the proper tools necessary to complete the job. This farm work completed by others is often referred to as “custom farm work” or more simply “custom work”. A “custom rate” is the amount agreed upon by both parties to be paid by the custom work customer to the custom work provider.

Custom farming providers and customers often negotiate an agreeable custom farming machinery rate by utilizing Extension surveys results as a starting point. Ohio State University Extension collects surveys and publishes survey results from the Ohio Farm Custom Survey every other year. This year we are updating our published custom farm rates for Ohio.

We kindly request your assistance in securing up-to-date information about farm custom work rates, machinery and building rental rates and hired labor costs in Ohio.

This year we have an online survey set up that anyone can access. We would ask that you respond even if you know only a few rates. We want information on actual rates, either what you paid to hire custom work or what you charged if you perform custom work. Custom Rates should include all ownership costs of implement & tractor (if needed), operator labor, fuel and lube. If fuel is not included in your custom rate charge there is a place on the survey to indicate this.

You may access the survey at: https://go.osu.edu/ohiofarmcustomratesurvey2022
If you prefer a document that you can print out and fill out by hand to return, email Barry Ward at ward.8@osu.edu
(Source: OSU Extension Ohio Ag Manager: https://u.osu.edu/ohioagmanager/2022/01/02/ohio-farm-custom-rate-survey-2022-responses-requested/)
AG ECONOMY BAROMETER...published by Purdue University indicates farmer sentiment rose in December. The full report is available here: https://ag.purdue.edu/commercialag/ageconomybarometer/wp-content/uploads/2022/01/December-2021-Ag-Economy-Barometer-1.pdf. Selected highlights are provided here.

For only the second time since May, the Ag Economy Barometer rose in December. This month’s index climbed to a reading of 125, 9 points higher than in November. Both the Index of Current Conditions and the Index of Future Expectations rose in December with the rise in the barometer attributable mostly to an improved perspective on current conditions in the agricultural sector. December’s Index of Current Conditions stood at 146, 18 points higher than a month earlier, while the Index of Future Expectations rose just 4 points to 114. A more positive outlook regarding their farm’s financial situation by ag producers was a major contributor to this month’s rise in both the Index of Current Conditions and the barometer. The Purdue University-CME Group Ag Economy Barometer sentiment index is calculated each month from 400 U.S. agricultural producers’ responses to a telephone survey. This month’s survey was conducted from December 8-14, 2021.
Farmers are very concerned about rising production costs and the availability of production inputs. When asked what their biggest concerns are for their farming operation in the upcoming year, higher input cost was overwhelmingly the top choice, with 47% of respondents choosing it from a list that included lower crop and/or livestock prices, environmental policy, farm policy, climate policy and COVID’s impact. In this month’s survey over half (57%) of producers said they expect farm input prices in the upcoming year to rise by more than 20% compared to a year earlier and nearly four out of ten respondents said they expect input prices to rise by more than 30%. This month’s survey also asked crop producers if they have had any difficulty purchasing crop inputs from their suppliers for the 2022 crop season. Nearly four out of ten (39%) of respondents said they’ve experienced some difficulties. In a follow-up question, producers experiencing difficulties making purchases were asked which crop inputs they’ve had trouble purchasing. Responses were quite varied indicating there are problems across the supply chain with farmers reporting difficulties in purchasing fertilizer (31%), herbicides (28%), farm machinery parts (24%) and insecticides (17%). Despite their concerns about both the rising cost and availability of inputs, just over half of corn/soybean growers said they expect farmland cash rental rates to rise in 2022 compared to 2021.

To review the complete report, please click this link: https://ag.purdue.edu/commercialag/ageconomybarometer/wp-content/uploads/2022/01/December-2021-Ag-Economy-Barometer-1.pdf.

SUPPLEMENTAL DAIRY MARGIN COVERAGE (SDMC)...program is available through FSA. Supplemental Dairy Margin Coverage (DMC) is for small and mid-size dairy operations with less than 5 million pounds of DMC established production history that have increased milk production over time prior to 2020. Dairy operations may establish supplemental production history and enroll that supplemental production history in DMC during the special enrollment period for 2021.
Who is Eligible?

For participation in 2021 Supplemental DMC, dairy operations must meet the following:
• DMC established production history of less than 5,000,000 pounds
• 2019 milk marketings must exceed established DMC production history
• Have an approved supplemental production history for the dairy operation on CCC-800A
• Already enrolled in DMC for 2021 DMC and submit a revised CCC-801 contract, during the special enrollment period, agreeing to the terms and conditions prescribed by CCC Note: Dairy operations not enrolled for 2021 DMC are not eligible to enroll in supplemental DMC during special enrollment.

How it Works Supplemental DMC Production History

To determine the dairy operations supplemental production history:
The dairy operations DMC established production history is subtracted from the dairy operations 2019 milk marketings with the result multiplied by 75 percent.

2019 Milk Marketing Statement

To establish supplemental production history, the dairy operation must provide a record of 2019 milk marketings in pounds. County offices will provide a copy of the 2019 marketing statement in the dairy operation DMC file folder.

Additional information is available here: https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/2021/supplemental_dairy_margin_coverage_dec_2021_fact_sheet_v3.pdf or by contacting the local FSA office.

FARM ACCOUNT BOOKS...have been selling like hotcakes! If you need one, please give us a call (330-339-2337) to make sure we have books available. As you complete year-end records, consider enrolling in the OSU Extension Farm Business Analysis & Benchmarking Program. Additional information is available here: https://farmprofitability.osu.edu/.

BEEF CATTLE PROJECTIONS...are discussed in this OSU Extension Beef newsletter: https://u.osu.edu/beef/2022/01/05/questions-a-plenty-going-forward/. This article includes a discussion of auction prices, inventory, and what prices may look like in 2022.
Auction Price Dynamics
As we know in agriculture, the law of supply and demand still has a great impact on commodity prices. Let’s talk about demand first.
We often do not know, especially with regards to fed cattle is the balance between supply and demand of a given packer on a given harvest day. For a plant to operate efficiently, it needs to operate at capacity to cover fixed costs associated with daily operations.

From the supply side of things, most packers fill a day’s harvest with a combination of cattle that are forward contracted, negotiated or formula priced, and cattle purchased on the cash market. Depending on where, and who the packer is, the ratios between the three purchasing avenues will vary greatly.
Without getting too into the weeds on how cattle are scheduled for harvest, one can deduce that if the supply of contracted or negotiated price cattle is limited, there is a need to purchase fed cattle on the cash or spot market.

When more than one packer at an auction is caught short handed on supply, the need to fill shackle spaces increases demand for cash cattle and thus creates higher prices at the sale barn. This is what happened the first week of December when several cattle sold at Ohio auctions brought $150-160 cwt, with market report highs topping out at $169 cwt.

As packers got caught back up with committed cattle, we followed that one week with steady, yet softer prices in mid-December.

Inventory
On the national level, cow inventory was down 1% in July compared to last year. Cattle on feed in feedlots with at least 1,00 head were reported to be down also 1% in October compared to 2020. Historically, cattle inventory is still rather large, with various plants running at reduced capacity due to health and labor implications of the COVID pandemic.

On a state level, according to the January 2021, USDA NASS report Agriculture Across Ohio cow numbers are slightly up from 2020 at 302,000 head, up 4,000 cows from a year ago. However, Ohio cattle on feed numbers are quite a bit lower, down 20,000 head from one year ago. In 2020, Ohio had 170,000 head on feed, compared to 150,000 in 2021. A similar story can be said with calf inventory down 35,000 head from one year ago. Keep in mind that these are January 1, inventory numbers.

As I visit with some of our colleagues in neighboring states, similar trends can be found with reduced brood cow numbers this year in Kentucky to the south, as one example.

High demand for beef, both domestic and for exports during the pandemic, led to higher-than-average cull prices throughout 2021. It is likely that cow numbers will be lower this coming January 1, and thus the coming 2022 calf crop will be smaller yet. Year-to-date (December 2021), beef cow slaughter nationwide has been up 10 percent according to Rabobank.
Into 2022
This increased cow slaughter total will lead US beef production to be down and estimated 2.5 percent in 2022 (Rabobank).
So, what will 2022 look like with regards to cattle prices? Barring any setbacks or the unknown, many industry experts have projected cattle prices to be higher across the board in 2022.

Regionally, the demand for high quality fed cattle from major packing plants closest to us (the two JBS beef plants in Pennsylvania and Michigan, Cargill in PA, and the Tyson plant in Joslin, Illinois) looks to remain strong, as does the demand for locally produced beef as the overall regional supply of cattle decreases.

Agriculture is always a numbers game, and given the numbers we have currently available, there is cause for optimism in the beef cattle business for 2022.

PASTURE FERTILIZER MANAGEMENT...recommendations are provided in this OSU Extension Beef newsletter: https://u.osu.edu/beef/2022/01/05/dealing-with-fertilizer-costs-and-shortages-no-silver-bullets/#more-11968. Dr. Chris Teutsch of UK Research and Education Center recently released a short YouTube video with John Grove – “Ten Tips to Help Livestock Producers Weather High Fertilizer Prices.” These tips are highlighted below:

1. There are no silver bullets: There are a lot of products out there now that promise a lot of things, and some allude to no fertilizer required. It is certainly possible to improve soil health with the microbial life of the soil to where some unobtainable nutrients are made more available, but it doesn’t happen overnight, and it isn’t a given. Good management of the forages is always key. Maintain good live cover, adequate rest between grazing events, and appropriate stop grazing heights.

2. Soil sample pasture and hay fields: Though some may argue that soil tests are not that beneficial, I disagree. A soil test provides a baseline to work from. If you don’t know where you are presently, then it is harder to figure out what direction you need to go!

3. Add lime first: The first priority item to address from your soil test is the pH. The pH indicates how sweet or sour the soil is. Most grasses prefer to be in the range of 6.0 to 6.4. A few legumes, like alfalfa for example, prefer a sweeter soil between 6.5 to 7.0. Lime is usually the best money first spent because if the pH is off too much, critical macro nutrients like phosphorus won’t be as available. If the pH is below 5.8, I’d recommend correcting the pH first and retesting after at least six months to assess everything else.

4. Don’t apply P & K if in medium soil test range: At moderate levels, you can maintain sufficient levels for a long time if only grazing. If you are taking hay off, especially multiple harvests during the growing season, then levels will reflect that and decline accordingly. If phosphorus and potassium are below the medium test range, then additional nutrients are beneficial for nutrition and yield.

5. Rotate stocking: The more livestock are rotated, or more precisely managed in such a way to get even distribution of manure and urine across the entire pasture, the better the redistribution of nutrients back into the soil and plants from where they came. Livestock that are allowed to roam bigger areas are much more likely to move nutrients from one part of the field to another. This is particularly true if water and mineral are a long walking distance. When this is the case, animals will tend to graze those...
distant locations for shorter periods and will then tend to ruminate and thus moving nutrients and creating low and hot spots in the process.

6. **Capitalize on nutrients in hay**: There are a lot of nutrients in a bale of hay, especially good quality hay. If we can feed some of this hay where nutrients are needed, then we can save on replacement nutrients. Feeding it where it is needed also reduces the amount of manure that needs to be hauled, saving time and fuel. Manure can be a very good source of nutrients for both pastures and hay fields. If using manure from confinement buildings or lagoons, treat it like you are putting on commercial fertilizer, get the manure tested and apply according to soil tests and yield goals. If you are buying hay, then you are not only buying feed for the livestock, but you are also buying nutrients for the farm that should be taken advantage of.

7. **Add legumes**: The addition of legumes to both pastures and hay fields has several economic benefits. They add additional digestible protein and nutrients, and when mixed with grasses, provide valuable nitrogen to the system that boosts both yield and overall quality. The addition of legumes is usually the second-best dollar spent after lime. Legumes fix nitrogen in root nodules. Rhizobia bacteria in the soil enter the root. The correct rhizobium bacteria must be present for the species, thus the reason for making sure that you inoculate seed prior to planting legumes. Most legumes are fairly pH sensitive, therefore, the pH needs to be corrected prior to planting for best results.

8. **Frost seed clover**: Frost seeding is one of the least expensive ways to enhance the stand of legumes in your pastures. It is basically the process of broadcasting the legume seed onto the soil’s surface during the winter dormant months. I usually say the ideal time is somewhere between Christmas and Valentine’s Day. When I really have my choosing, I’ll wait until there is a light snow on the ground and then do the sowing. The snow serves two good purposes. One, it helps “catch” the seed and transport it to the ground and two, it serves as a great marker for the tractor or ATV.

9. **Manage Nitrogen applications**: When nitrogen fertilizer prices are high, we need to be as efficient as possible with applications. Early applications of nitrogen can boost the yield of the first cutting of hay, but with long wet springs, it can also throw fuel on the fire and create stands of forages that are not only hard to dry if you are wanting dry hay, but also may be too competitive with legumes we want to maintain. Nitrogen applications are sometimes better utilized for secondary cuttings to boost yield and quality and or for stockpiled forage for fall and winter grazing. Apply any nitrogen when it can be utilized the most efficiently. If you have high amounts of legumes in the sward, then you may not need much or any additional nitrogen depending on your goals.

10. **Monitor Hayfields closely**: Like mentioned already, hay removes a lot of nutrients that will have to be replaced eventually to maintain future yields. When nutrients fall into the low category, forage yield and quality both suffer and there can also be a shift in the sward to plants that are more adaptable to low levels of some nutrients. Broomsedge, yellow bluestem, is a good example of a low nutrient soil increaser. Fields used only for hay should be treated like a regular crop field and fertilized as needed to maintain at least a moderate fertility level.

**BQA TRAINING**...for beef and dairy producers will be offered at the Sugarcreek Stockyards on the following dates:

- January 20 (1pm)
- February 28 (7pm)
- March 30 (7pm)

Please call 330-339-2337 to RSVP.