

COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES**June 29 (Edition #153)**

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Hello Coshocton County! It is hard to believe that there is only one day left in June. And this weekend will be filled with cookouts, fireworks, family gatherings and even some hay making. I am so thankful for all of the freedoms we are able to enjoy and for our nation's rich heritage. We truly blessed to live in this country.

Kudos to Ryan Medley and Zach Wallace for their leadership for a nice pasture walk last evening. These walks are always a great way for producers to learn from each other.

I have included Dianne Shoemaker's (OSU Dairy Field Specialist) last column for the Farm and Dairy Newspaper. Dianne's work over the past 36 years has had a strong impact on Ohio agriculture—particularly our dairy industry. Dianne's work will truly be missed.

I hope you all have a great 4th of July Weekend!

Sincerely,

David L. Marrison

Coshocton County OSU Extension ANR Educator

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THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Cost of July 4th Cookout 17% Higher

By: American Farm Bureau Federation

Source: <https://www.morningagclips.com/cost-of-july-4th-cookout-17-higher-compared-to-a-year-ago/>

U.S. consumers will pay \$69.68 for their favorite Independence Day cookout foods, including cheeseburgers, pork chops, chicken breasts, homemade potato salad, strawberries and ice cream, based on a new American Farm Bureau Federation market basket survey.

The average cost of a summer cookout for 10 people is \$69.68, which breaks down to less than \$7 per person. The overall cost for the cookout is up 17% or about \$10 from last year, a result of ongoing supply chain disruptions, inflation and the war in Ukraine.

Farmers are feeling the price-point pain too, like the people they grow food for, according to AFBF Chief Economist Roger Cryan. “Despite higher food prices, the supply chain disruptions and inflation have made farm supplies more expensive; like consumers, farmers are price-takers not price-makers,” Cryan said. He added, “Bottom line, in many cases the higher prices farmers are being paid aren’t covering the increase in their farm expenses. The cost of fuel is up and fertilizer prices have tripled.”



The average cost of a summer cookout for 10 people is \$69.68, which breaks down to less than \$7 per person. Increases are the result of ongoing supply chain disruptions, inflation and the war in Ukraine

Cryan also pointed to the cascading effects of the war in Ukraine, as that country’s contributions to global food security are cut off, Russian and Belarusian fertilizer exports are constrained, and some other countries pull back exports to protect their domestic supplies.

The market basket survey shows the largest year-to-year price increase was for ground beef. Survey results showed the retail price for 2 pounds of ground beef at \$11.12, up 36% from last year. Meanwhile, the Agriculture Department’s Producer Price Index indicates that compared to a year ago, farm-level cattle prices are up 17.5%, but wholesale beef prices are down 14%. This serves to highlight the differences between farm-level, wholesale and retail beef prices and how the events of the last few years have had significant impacts on the beef production and cattle pricing cycles, making them all hard to predict.

Several other foods in the survey, including chicken breasts, pork chops, homemade potato salad, fresh-squeezed lemonade, pork & beans, hamburger buns and cookies, also increased in price. One bright spot for consumers is the average retail price for strawberries, which declined by 86 cents compared to a year ago. Sliced cheese and potato chips also dropped in price, 48 cents and 22 cents, respectively. Better weather conditions in some fruit-growing regions and greater retailer pricing flexibility for processed products are the likely drivers behind the modest price declines for these items.

The year-to-year direction of the market basket survey tracks with the federal government’s Consumer Price Index report for food at home and general inflation across the economy. Both the index and the market basket show increases of more than 10% compared to year-ago levels. “According to the Agriculture Department’s revised Food Dollar Series, farmers currently receive approximately 8% of every food marketing dollar,” Cryan said. “The farmers’ share of the retail food dollar is as low as 2% to 4% for highly processed foods such as bread and cereal, and can be 35% or more for some fresh products.”

Commenting on big picture concerns related to food security, AFBF President Zippy Duvall said: “The increased cost of food and supplies is a very real concern in our country and across the globe. U.S. food assistance programs and food banks help those who struggle to make ends meet here at home, but the story

is much different around the globe as food insecurity skyrockets. The big impact of a single event in Ukraine shows how dependent the world is on stable, productive agriculture.

The July 4th cookout survey is part of the Farm Bureau market basket series, which also includes the popular annual Thanksgiving Dinner Cost Survey of common food staples Americans use to prepare meals at home.

Data for this year's survey was collected by 176 volunteer shoppers across the country and in Puerto Rico, including Farm Bureau members and others.

Individual Prices, AFBF 2022 Summer Cookout

- 2 pounds of ground beef, \$11.12 (+36%)
- 2 pounds of boneless, skinless chicken breasts, \$8.99 (+33%)
- 32 ounces of pork & beans, \$2.53 (+33%)
- 3 pounds of center cut pork chops, \$15.26 (+31%)
- 2.5 quarts of fresh-squeezed lemonade, \$4.43 (+22%)
- 2.5 pounds of homemade potato salad, \$3.27 (+19%)
- 8 hamburger buns, \$1.93 (+16%)
- Half-gallon of vanilla ice cream, \$5.16 (+10%)
- 13-ounce bag of chocolate chip cookies, \$4.31 (+7%)
- 2 pints of strawberries, \$4.44 (-16%)
- 1 pound of sliced cheese, \$3.53 (-13%)
- 16-ounce bag of potato chips, \$4.71 (-4%)



AFBF is the nation's largest general farm organization with member families in all 50 states and Puerto Rico. Learn more at <http://facebook.com/FarmBureau> or follow [@FarmBureau](https://twitter.com/FarmBureau) on Twitter or [@farmbureau](https://www.instagram.com/farmbureau) on Instagram.

Coshocton County Pasture Walk Held Last Night

A pasture walk was held at the Mike Rettos farm in Lafayette Township on Tuesday evening June 28. During the pasture walk, participants learned more about grazing reclaimed ground, viewed a winter-feeding pad and learn more about soil and manure management.



Nutrient Value of Wheat Straw

By: Laura Linsey, Lee Beers & Ed Lentz

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-20/nutrient-value-wheat-straw>

Before removing the straw from the field, it's important farmers understand the nutrient value. This is especially important now with high N, P, and K fertilizer prices. The nutrient value of wheat straw is influenced by several factors including weather, variety, and cultural practices. Thus, the most accurate values require sending a sample of the straw to an analytical laboratory. However, "book values" can be used to estimate the nutrient values of wheat straw. In previous newsletters, we reported that typically a ton of wheat straw would provide approximately 11 pounds of N, 3 pounds of P₂O₅, and 20 pounds of K₂O. According to June 2022 fertilizer prices and nutrient removal "book values", one ton of wheat straw would remove N, P, K valuing approximately \$30.31.



Table 1. What is the value of your straw? N, P₂O₅, and K₂O removed in straw, June 2022 fertilizer prices, and the total value of nutrients within the wheat straw.

	N	P ₂ O ₅	K ₂ O
Removed in straw	11 lb/ton	3 lb/ton	20 lb/ton
June 2022 Price	\$1.10/lb N	\$1.07/lb P ₂ O ₅	\$0.75/lb K ₂ O
Value	\$12.10	\$3.21	\$15.00
TOTAL VALUE OF REMOVED NUTRIENTS = \$30.31 PER TON			

The nitrogen in wheat straw will not immediately be available for plant uptake. The nitrogen will need to be converted by microorganisms to ammonium and nitrate (a process called "mineralization"). Once the nitrogen is in the ammonium or nitrate form, it is available for plant uptake. The rate at which mineralization occurs depends on the amount of carbon and nitrogen in the straw (C:N ratio). The USDA reports a C:N ratio of 80:1 for wheat straw which means there are 80 units of carbon for every unit of nitrogen. Mineralization rapidly occurs when the C:N ratio is $\leq 20:1$. At a C:N ratio of 80:1, mineralization will be much slower. (For comparison, corn stover is reported to have a C:N ratio of 57:1.) The rate of mineralization is also influenced by soil moisture and temperature. Since mineralization is a microbial-driven process, mineralization will be slowed (halted) in the winter when temperatures are cold. Thus, no N credit is given for wheat straw since it is not known when the N will mineralize and become available to the following crop.

In addition to nitrogen, the removal of straw does lower soil potassium levels. If the straw is removed after heavy rainfall, some of the potassium may have leached out of the straw, lowering the nutrient value. However, a soil test should be done to accurately estimate nutrient availability for future crops. Besides providing nutrients, straw has value as organic matter, but it is difficult to determine its dollar value.

Supplemental Forages to Plant in July After Wheat

By: Mark Sulc & William Weiss

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-20/supplemental-forages-plant-july-after-wheat>

Some producers may be considering planting a supplemental forage crop after winter wheat grain harvest for various reasons. Some areas of the state are becoming very dry. In many areas, the wet weather this spring resulted in ample forage supply, but good to high-quality forage is in short supply because of the wet weather that delayed harvesting until the crop was mature, or it resulted in rained-on hay that lowered quality. The table below summarizes options for planting annual forages after wheat harvest.

Species	Comments
Corn plant silage	Highest single-cut forage yield potential of all choices. Silage quality will be lower than normal planting dates. The risk is getting it harvested at the right moisture for good fermentation.
Forage sorghum Sorghum-sudangrass Sudangrass	Best harvested as silage. Brown midrib (BMR) varieties have higher digestibility and are best for growing animals and lactating cows; however, conventional varieties are okay if BMR seed is not available. Can produce 3-4 tons of dry matter/acre. Potential high nitrates under drought conditions. Risk of prussic acid (hydrogen cyanide gas) if frosted.
Soybean silage	A reasonable alternative to replace alfalfa forage. Check seed treatment and herbicide labels, many restrict forage use.
Teff grass	Best suited to beef and sheep; lower yield than sorghum grasses. Can be harvested as hay or silage.
Millets	Best suited to beef and sheep; many produce a single harvest. Best harvested as silage. Potential high nitrates under drought conditions. Pearl millet has no prussic acid after frost damage.
Mixtures of annual grasses with soybean	Best harvested as silage. Mixtures of sorghum grasses or millets or even oats and spring triticale with soybean are feasible and soybean can improve forage quality characteristics.

The forage grass options all require adequate nitrogen to maximize yield potential, either as fertilizer or manure (about 60 lbs of actual available nitrogen per acre). Check any potential herbicide restrictions from the previously planted crop and consider herbicides used after wheat and before planting these annual forages.

Chopping and ensiling or wet wrapping are the best mechanical harvest alternatives for most of the options listed. Wilting is usually necessary. Storage and harvest costs are greater, and fermentation quality can be poor with crops less than about 30% DM (greater than 70% moisture). Ideally, silage should be left undisturbed for at least two weeks to allow the forage to reach stable fermentation. If forage is needed sooner, consider daily green chopping of forage or wet wrapping individual bales for feeding until the silage is ready. Except for Teff, dry baling any of the listed forages is a challenge. Work with your nutritionist to incorporate these alternative forages into properly balanced rations.

In addition to these options, Italian ryegrass or oats can be planted in early August, if soil moisture is adequate. They will produce forage into the autumn months, and Italian ryegrass will likely survive the winter and produce forage next spring and early summer depending on the variety planted. They are suitable for ensiling or wet wrapping or grazing in the autumn. Brassicas can be planted in early August as well, but they are only suitable for grazing in the autumn, not for mechanical harvesting.

For more information see the following:

<https://dairy.osu.edu/newsletter/buckeye-dairy-news/volume-21-issue-3/emergency-forages-planting-early-mid-summer>

<https://forages.osu.edu/forage-management/forage-species-varieties/annual-forages>

Consult the Ohio Agronomy Guide for management details, available at <https://extensionpubs.osu.edu/ohio-agronomy-guide-pdf/>

Double-Crop Soybean Weed Management

By: Mark Loux

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-20/double-crop-soybean-weed-management>

It's been a tough summer in parts of Ohio to do anything on a timely schedule and there are some weedy fields. The best advice we have for big weeds in full-season soybeans is to increase rates and the complexity of POST herbicide applications, while still adhering to cutoffs for the application of certain herbicides as much

as possible. Dicamba products, XtendiMax, Engenia, and Tavium, cannot legally be applied to Xtend and XtendiFlex soybeans after June 30. This cutoff date pertains to use in double-crop soybeans also. If you are planning on planting Xtend or XtendiFlex soybeans in double-crop fields and using dicamba as a burndown, apply before Friday. There isn't a cutoff date for most other POST soybean herbicides – it's based on either crop stage (eg R1) or days before harvest.

Double crop soybeans usually need some type of weed control program, although how weedy they get depends upon weeds surviving down in the wheat that can take off once they receive light; how much rain we get in July, which drives additional weed emergence and rate of soybean growth; and how fast the soybeans grow and develop a canopy. Control can occur via the use of pre-plant/preemergence burndown herbicides, followed by POST as needed. It's also possible to accomplish this with one early POST application in Enlist soybeans, using Enlist Duo or a combination of Enlist One with glyphosate or glufosinate. And also in LLGT27 soybeans with a combination of glyphosate and glufosinate. Herbicides need to address marestail in many fields, which is often lurking in the wheat ready to regrow. Marestail that are taller and get cut off by the combine will be more difficult to control than the smaller intact ones below the cutter bar. Herbicide options vary depending upon the weeds and what type of soybeans are planted. More effective options include:

- Glyphosate or glufosinate + Sharpen (1 oz) + MSO – any soybean, prior to emergence
- Glyphosate or glufosinate + 2,4-D – any soybean, at least a week before planting
- Enlist Duo; glyphosate or glufosinate + Enlist One (Enlist soybeans) – PRE or POST, no wait to plant
- Glyphosate + XtendiMax or Engenia (Xtend or XtendiFlex soybeans) – PRE, apply by June 30
- Glyphosate + glufosinate – PRE in any soybean, PRE or POST in LLGT27 soybean

It is possible to include residual herbicides with a PRE burndown treatment, but their value in this situation is questionable. Residual herbicides with long recrop intervals to corn should be avoided. POST options in double-crop include glufosinate, glyphosate, Enlist One/Duo, and conventional herbicides, depending upon the type of soybean planted. One caution here is to avoid excessive injury to soybeans that slows growth and development since this is likely to reduce yield due to the short season. Weed emergence is reduced and variable in July compared with May and June. Where burndown herbicides are used, but there is still a need for POST herbicides to control a flush of late-emerging weeds, consider reduced rates. Research we conducted back in the 1990s demonstrated that weeds up to 2 inches tall can usually be controlled with half of a typical labeled rate. When we planted soybeans in early June, the single application of a half-rate provided adequate control, versus early May when a second application was needed. So this should be a suitable approach for double-crop soybeans. Just be sure to start with an effective burndown at planting, and apply when weeds are well within the 2-inch size.

Tri-State Precision Ag Conference

By: Alan Leininger

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-20/tri-state-precision-agriculture-conference>

The second annual Tri-State Precision Agriculture Conference will be held at Northwest State Community College in Archbold, Ohio on July 27, 2022. This year's event will highlight sprayer and pesticide application technology. The morning sessions will feature presentations on Best Practices for Efficient Application of Pesticides by Erdal Ozkan, Professor Department of Food, Agriculture, & Biological Engineering Ohio State University; How to Manage Sclerotinia White Mold in Soybeans by Michael Staton, Soybean Educator Michigan State University; Managing Tar Spot in Corn by Pierce A. Paul, Professor Cereal Pathology, Epidemiology Ohio State University.

Spray Drone

During the event, a hands-on sprayer demonstration featuring sprayer calibration, deposition, drift from different nozzles, spray uniformity, and boom movement. The afternoon will feature technology demonstrations from manufacturers such as John Deere, Hagie, Case IH, Hardi, and many more. Demonstrations on current UAS "Drone" spraying technology will also be featured. Several agribusinesses will be featured



in the trade show area including the field demonstration companies. Private Pesticide Applicator credits (PAT) and Certified Crop Advisors (CCAs) recertification credits will be available. You may register for the event at <https://go.osu.edu/henryanr2022>. If you would like more information, please contact the Henry County Extension Office at 419-592-0806 or email at leininger.17@osu.edu.

Cover Crop 'Forage' an Option for Prevented Planting Corn or Soybean Acres

By: [Stan Smith](#), OSU Extension PA, Fairfield County

Source: <https://u.osu.edu/beef/2022/06/22/cover-crop-forage-an-option-for-prevented-planting-corn-or-soybean-acres/#more-12888>

Today, as we sit here on June 22, we know a few things for certain:

- Across Ohio there remain today unplanted acres that were originally intended for corn or soybeans.
- The 'final planting date' that allows planting corn or soybeans without reducing the crop insurance guarantee has passed.
- Despite the value of producing corn and soybeans for the marketplace, for those with coverage, today the income resulting from Prevented Planting Crop Insurance payments must be considered as an alternative. (see the recent Ohio Ag Manager article [Evaluating the Prevent Plant Option](#))
- For livestock producers, planting a cover crop that could be utilized as feed late this fall could add value to unplanted corn or soybean acres.

Today, insured corn and soybean growers throughout Ohio find themselves at the crossroads of a decision that pits the overwhelming desire to want to plant and grow a crop for historically high prices against the reality that financially and agronomically it might be a sound alternative to accept a Prevented Planting insurance payment. Adding further support to the notion that today one might be better off not planting the corn or soybean crop is the opportunity to plant a 'cover crop' in those insured but unplanted acres and utilize it for cattle feed late this fall.

You may ask why I'm discussing crop insurance for corn or soybeans in a beef cattle publication. Once the decision to apply for Prevented Planting (PP) has been made, cover crops – including those a cow can eat – may be planted on those PP acres and then hayed, grazed, cut for silage, haylage or baleage without affecting the PP payment. This allowance to harvest cover crops for forage at anytime is a change for 2022 from recent years when harvest wasn't allowed until November 1.

Before we go further, if you're considering planting a cover crop that you might hay or graze on PP acres, check with your crop insurance agent and Farm Service Agency for any additional restrictions or timing issues you might need to consider, and also see the USDA RMA on-line publication [Prevented Planting Coverage](#).

While there are a variety of cover crops that might be planted and make feed yet by fall, I suggest spring oats be considered as a viable, affordable and productive alternative. Not only are there plenty of jobs on the farm aside from planting cover crops that need immediate attention, soil conditions across parts of Ohio remain too wet for planting them today, many of those fields are plagued with weeds that have yet to be controlled, and in some cases fields may still be rutted from last fall's harvest. Further, if forage and not grain is the goal of a planting on PP acres, plenty of time remains to get oats planted.

Over the years we've found it's not important to rush to get spring oats planted in order to grow high quality forage late in the summer. In fact our experience has been that we get a greater yield and higher quality feed if we wait until the end of July or early August to plant oats for forage. Without getting into a science lesson, it seems the oats prefer the cooler average daily temperatures we typically experience beginning in August, and they are more likely to not push out a seed head, but remain vegetative until extremely cold temperatures shut them down completely, typically not until sometime in December.

Not only does an August 1 planting date seem to offer more yield and higher quality oats, but it will also allow ample time for fields to dry, ruts from last fall or erosion gullies from this spring to be repaired, manure to be hauled, and weeds to be controlled. Based on our experience beginning 20 years ago in Fairfield County with

oats planted mid to late summer, if you can utilize a forage for haying or grazing late this fall or early winter, oats appear to be the most productive, highest quality, least cost, single harvest alternative available to Ohio livestock producers for planting during the summer months. In fact with some timely rainfall, when planted most any time before late August, there's an opportunity to 'create' on a dry matter basis anywhere from two to five tons of forage while investing little more than the cost of 80-100 pounds of oats and 40 pounds of nitrogen.

For more detail on our experience with planting spring oats after mid-summer in Ohio, see any one of a number of previous articles found in this publication including:

[Oats as a late summer forage crop](#)
[Oats, an Annual Forage to Consider](#)

An additional advantage observed when using oats for an annual forage crop is the opportunity to capture the total tonnage produced with a single cutting harvest if grazing is not an option. Crops that require multiple mechanical harvests increase costs of production significantly.

As oat forage harvest options are considered, grazing provides the most effective and affordable alternative. In 2002, locally one family strip grazed oats all winter and actually began the calving season on them before the oats ran out in mid March.

During the winter of 2013 Ohio Forage and Grassland Council Annual Meeting, I was invited to share the presentation found on YouTube embedded below. It includes a number of photos, about our past experience of growing oats late in the summer for forage. Oats, planted late in the summer, could indeed offer a productive and high quality forage alternative. This video can be accessed at: <https://youtu.be/yW124VH6R6M>

What Was That Early Maturing Grass in My Hay Fields?

By: [Chris Penrose](#), Professor & Extension Educator, Agriculture & Natural Resources, OSU Extension, Morgan County

Source: <https://u.osu.edu/beef/2022/06/29/what-was-that-early-maturing-grass-in-my-hay-fields/#more-12901>

Did you notice a very early maturing grass in your hay fields this spring? I have seen it for years and it continues to spread. About the time or just before bluegrass heads out, this grass matures as well. What you really notice is a small, tight clustered seedhead and a stem that is rather short.

For years, I called it cheat grass and for some reason, after I told a farmer what I thought it was, I went back and checked. I quickly realized that it was not cheat grass and I could not figure out what it was. So I did what you are supposed to do – I called a county educator, Clif Little from Guernsey County. When I explained it to him, he quickly told me that it was Sweet Vernalgrass. Then I check out the name and he was exactly right. For 25 years, I have told farmers the wrong name – for that I am sorry, but now I know and I hope you do too.

After doing some searching on it, it tends to be more prevalent in lower fertility hay fields. It can be a winter annual or a perennial grass. There is mixed information on palatability but my cows have consumed it for years in my hay. In fact, it used to be sold in some hay mixtures. It gives off a fragrant smell when cut or crushed. It gets a couple feet tall, but most of what I cut is just the stems and seedheads, likely making it a much lower quality hay. The thin stem allows it to cure faster but we don't want to rush baling it as improperly cured Sweet Vernalgrass hay can produce dicumarol, the same thing moldy sweet clover produces and can be deadly to livestock. With all the unwanted plants springing up, this is one that should not be an issue, especially if the hay is well cured. I just think it is a sign that we could most likely be growing something better.



Sweet Vernalgrass.
Photo: mt.gov

Alfalfa Fertility Needs

By: [Brooks Warner](#), OSU Extension Ag and Natural Resources Educator, Scioto County

Source: <https://u.osu.edu/beef/2022/06/29/alfalfa-fertility-needs-and-site-selection/>

Alfalfa is known as the queen of forages for its ability to produce incredible amounts of high-protein forage in an array of different environments. Proper management of alfalfa stands can help producers maintain the highest quality and yielding alfalfa for their livestock enterprises. In Ohio, alfalfa thrives in our growing conditions and producers can potentially harvest five times in a growing season. For maximum yield and a healthy alfalfa stand, proper soil fertility is crucial. Soil tests are crucial in understanding which nutrients we are deficient in, and with the price of fertilizer and high-quality alfalfa, it is important to know if we are applying too much or not enough fertilizer.



When given the highest level of management, alfalfa can be our most productive forage. Photo: Osler Ortez

Soil pH

Highest yielding alfalfa is grown in soil with a pH of 6.7 (McLean and Brown, 1984). In southeastern Ohio we tend to have low pH soil, so applications of lime are regularly needed. Soil pH plays a large role in alfalfa stand longevity and plant density.

Low pH can have a negative effect on yield, as acidic soil reduces the effectiveness of Rhizobia bacteria to create nitrogen for the plant, whereas higher pH does not affect yields in alfalfa. If soil pH is below 6.7 lime should be applied to raise pH. In addition to low pH decreasing yield, low pH also reduces crude protein and increases fiber content. This adds to an overall decrease in alfalfa hay quality.

Nitrogen

Alfalfa is a nitrogen fixing legume, meaning that through nodulation in the roots from Rhizobia bacteria, N is produced naturally for the plant to utilize. An application of N is not recommended in alfalfa production. Seeds will be inoculated with the N fixing bacteria before planting.

Phosphorus

Phosphorus is the most yield limiting nutrient in alfalfa, meaning that yield is in direct correlation with P availability to the plant. Desired P levels should be at least 15 parts per million before alfalfa is seeded. Each ton of alfalfa harvested can remove 14 pounds of phosphate P₂O₅ from the soil, so soil samples should be taken annually to know if a P₂O₅ application is needed.

P deficiency can simply look like reduced yields, as well as stunted plants and chlorosis. P₂O₅ can be broadcasted and incorporated before seeding, or as a topdressing on established stands.

Potassium

K is the most important nutrient for alfalfa's ability to overwinter without experiencing plant death. K deficiencies can look like winterkill, as well as yellowing on the outside of leaves towards the top of the plant. Each ton of alfalfa removed can take 60 pounds of K₂O with it, so annual soil samples should be taken to know if a potash application is needed. K₂O, like our P₂O₅ application can be broadcasted and incorporated before seeding or top-dressed to established stands.

Fertilizer application timing

Fertilizer applications in alfalfa should be made twice annually. A split application of P and K should be made in fall after the last harvest, and again in late spring or early summer after the first cutting. This ensures that growers do not run low on nutrients for the third or fourth cutting of alfalfa. The fall application allows K to be taken into the root system during the winter months and P will become available in the spring. The application after first cutting will provide the alfalfa plants with sufficient nutrients for third and fourth cutting.

With the cost of inputs this year it can be daunting to look at the fertility needs of alfalfa to ensure a good harvest and maintain alfalfa stand health. For this reason, I urge producers to focus primarily on soil pH and utilization of lime if you have low pH issues in your soil. With a low pH, a fertilizer application may not be utilized fully and will not be beneficial in your alfalfa crop or for your billfold this year. Looking at correcting soil pH before a fertilizer application does not just apply to years when fertilizer prices are high, but this year there should be a clear emphasis made on pH before money is spent on fertilizer if your soil test comes back and you are not deficient in P or K.

Lime applications do not amend soil pH immediately, producers that apply lime this year will see improvement in pH in the following year. With this being said, fertilizer prices will most likely remain high next year.

What Assets Are Subject to Divorce?

By: Robert Moore, Attorney and Research Specialist, OSU Agricultural & Resource Law Program

Source: <https://farmoffice.osu.edu/blog/thu-06232022-910pm/what-assets-are-subject-divorce>

A well-known statistic is that one-half of all marriages end in divorce. While there is some debate as to the accuracy of this statistic, there is no doubt that many marriages do end in divorce. According to Ohio law, all marital assets are to be divided equitably in the event of a divorce. Equitable does not necessarily mean equal although an equal division of assets between the spouses is often the result. It is important to note that only marital assets are subject to the equitable division between the spouses. Non-marital assets, or separate assets, are retained by the spouse who owns the asset.

Separate assets include the following:

- An inheritance received by a spouse during marriage
- A gift received by a spouse during marriage
- Property acquired by one spouse prior to the date of marriage
- Passive income and appreciation from separate property by one spouse during marriage



The above list would seem to make it an easy exercise to determine what are marital assets and what are separate assets in a divorce. However, like many legal issues, this is often not the case. Determining whether an asset is a marital assets or a separate asset can be complicated. For example, Ohio law also provides that the following is a marital asset:

“... all income and appreciation on separate property, due to the labor, monetary, or in-kind contribution of either or both of the spouses that occurred during the marriage.”

So, it is possible for an asset to be partially a marital asset and partially a separate asset. Consider the following example:

Andy and Beth are farmers and in the process of divorcing. Shortly after they were married, Beth inherited a 100-acre farm from her grandmother. When she inherited the farm, it was valued at \$600,000. A few years after inheriting the farm, \$80,000 of drainage tile was installed on the farm paid for by Andy and Beth’s farming operation. The current value of the farm is \$1,000,000.

In this example, when Beth initially inherited the farm it was a separate asset. However, the tile that improved the quality and value of the farm was paid for by Andy and Beth’s joint farming operation. Therefore, Andy likely has a valid claim that at least part of the \$400,000 increase in value is a marital asset due to the tile installation paid for by money earned during the marriage.

Perhaps Andy further argues that most of the increase in value was due to the fertilizer, tillage and other soil improvements made while Andy and Beth farmed the land. Andy's argument tries to make the entire \$400,000 increase a marital asset. Conversely, Beth argues that the land value increase was not actually earned during marriage but was merely a passive value increase due to market pressure and nothing that Andy did. Beth's argument tries to make most of the \$400,000 increase a separate asset.

As this example illustrates, an asset that is initially a separate asset can become, at least in part, a marital asset. Both Andy and Beth have valid arguments as to their positions. It is not hard to imagine how much time and legal fees could be spent resolving or litigating the issue in a contentious divorce.

People who own significant assets prior to marriage or may inherit assets during the marriage should consider a prenuptial agreement that will clearly identify which assets are to be marital and which assets are to be non-marital. If the couple did not enter into a prenuptial agreement, the spouses should be careful not to taint any assets they wish to keep separate. For farm assets, this may be difficult due to the nature of improving the assets as part of the farming operation. For some non-farm assets, such as financial accounts, it may be easier to maintain the separate status of the assets.

Dianne Shoemaker's Last Dairy Excel Column

By: Dianne Shoemaker, OSU Dairy Field Specialist

Written for the Farm & Dairy Newspaper, Publication on June 30

"What a cool job Dan Cowdrey has!" I thought as I left the Highland County Ag Extension Agent's office in 1982. He had reviewed the ration I had calculated for the herd of 60 holsteins I had just started to manage. Four years later I walked into the Columbiana County Extension office on Saltwell Road in Lisbon to start my own really cool job as the Agriculture Agent. This job was a gift in many ways as it also brought Steve and I close to his family in Stark County and an opportunity to begin our own dairy farm.

At that time Ohio's dairy landscape was crowded with dairy farms milking a few cows to a hundred or so cows. In April of 1986 there were 388,000 dairy cows in Ohio that produced 421 million pounds of milk that month. Many cows were still housed in bank barns, some with attached sheds or in shorter, solid-sidewalled pole barns.

Time went on, we learned more about managing cows and farms, milk markets changed, and herd sizes grew. One of the best things that happened to many of those bank and pole barns was the older generation finally going on vacation. During those vacations more than one of those barns "lost" siding as the benefits of ventilation and unimpeded airflow at cow level were better understood. The younger generation got tired of waiting for the older folks to jump on board and just opened things up.

If I had to choose two words to describe the dairy industry over the past 36 years, "constant change" would be my pick. Many changes were relatively easy and made sense, some were hard to see the whys or the benefits, especially when we had little control over the change and had to adapt or figure out what opportunities might materialize. A few changes that pop to mind:

- Tiestalls to freestalls
- Upright silos to bags to bunkers
- Small square to large square bales
- "Mixing" in conveyors to stationary then portable feed mixers
- Whatever light there was to added and controlled lighting
- No ventilation to open sidewalls, ridge vents, fans and sprinklers
- Variable speed milk compressors – saved the hearing of many!
- Milking robots from clunky to practical
- Manure: waste to nutrient
- Calf management from surviving to thriving
- Age at first calving from 30 to 36 months to 24 and under
- Raise every heifer to beef crossbreeding and selecting heifers for replacement
- Milk prices set by local markets to international influences
- Many milk cooperatives, processors, buyers to few

- Growth of animal welfare, environmental impact and consumer input issues
- Taking a milk price to pricing and risk management options
- No computers to computers and apps for farm and animal management
- Many input sources consolidating into fewer with less competition
- Continuously increasing herd sizes

The consolidation of Ohio's dairy industry has been hard. Hard for the families that no longer milk cows, hard for the many small ag businesses that no longer support the dairy industry. Both of these losses are felt in communities across the state.

Milk pricing is a mess and frustrating for all involved. Can it be fixed? It can certainly be changed with that goal in mind, but it will be a long and tiring process with neither producers nor processors completely satisfied in the end. Compromise will be needed on both sides, but an understandable, transparent system will go a long way toward building a system that could work for the next 30 years.

In April of this year, Ohio had 250,000 cows that produced 460 million pounds of milk. Thirty-five percent fewer cows produced 9% more milk than in 1986. Advancements in genetics, management, and markets driving change.

The beauty of Ohio's dairy industry is that there is not a single recipe for success in the midst of this on-going change. While the trend will continue toward fewer and larger farms, size does not guarantee success. Good cows, good management, good people, good finances, planning, and a willingness to accept and adapt to changes we cannot control are all important factors.

It has been an honor and a privilege to work with farm families and industry professionals across Ohio, being welcomed onto farms and into homes, barns and classrooms. A next generation of Extension educators and specialists are ready to walk with Ohio's dairy industry into the future. To work together on issues and opportunities. To learn from each other. Wishing you all the best in the future and looking forward to seeing how our industry grows and changes in the next 36 years.

