

COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES**May 29, 2019 Issue**

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Hello Coshocton County! It is great to see the planting progress which has happened over the past two weeks here in Coshocton County. While rain keeps popping up, we are in far better shape than the majority of the state. Let's hope as we move into June that we get even longer windows of field time; especially to help our farmers who need to make hay and to finish planting soybeans.

There is a lot of discussion about Prevented Planting across the state. While we are in a lot better shape than most, I am including some great articles on this subject as the June 5 and June 20 dates for full guarantee are looming. Additional articles look at the impact of delayed planting, weed control issues, and hay drying. Also the final article in today's newsletter will give you a glimpse of where Coshocton County Agriculture stacks up as reported by the 2017 Ag Census.

I was very pleased that we were able to finish the second planting of the "Boots on the Ground" soybean research plot at Lapp Farms this afternoon. Thankfully the rain was sliding north of where we were planting. I really appreciate David Lapp, Jason Massie and Pat Snyder for cooperating with this research project.

Stay safe out there! Here is hoping to better weather patterns as we move into June!

*Sincerely,**David Marrison*

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Master Gardener Plant Sale

The annual Master Gardener Volunteers Plant Sale, the group's major fund raiser, will be held June 1, 2019, in the Rotary Pavilion at the Coshocton County Fairgrounds. Demonstrations will start at 8:30 am and the sale will run from 9:00 am until noon or the plants are gone, whichever comes first. It is a good idea to arrive early for the best selection as the plants sell quickly. There are NO EARLY SALES of plants before 9 a.m. The plant sale will offer some of the nicest plants from the gardens of the MGVs and their friends. You may find assorted tree seedlings, vegetable plants, annuals, many perennials, herbs, house plants and garden related accessories. The plants are reasonably- priced and many are ready to plant directly into your garden. All plants are labeled with their common and proper names, growing conditions, and size. Please bring your gardening questions and ask any of the Master Gardener Volunteers.... we LOVE to talk about plants, bugs and anything garden related!

Corn vs Soybeans in a Delayed Planting Scenario- Profit Scenarios

Corn vs. Soybeans in a Delayed Planting Scenario – Profit Scenarios

by: Barry Ward, Leader, Production Business Management & Director, OSU Income Tax Schools

Source:

<https://u.osu.edu/ohioagmanager/2019/05/28/corn-vs-soybeans-in-a-delayed-planting-scenario-profit-scenarios/>

Wet weather and planting delays throughout much of Ohio and the eastern Cornbelt have many producers thinking about switching corn acres to soybeans or the taking the prevented planting option of their Multiple Peril Crop Insurance policy. Ohio had 9% of intended corn acres planted by May 19th which is far behind the 5 year average of 62%. Farms with pre-plant nitrogen or herbicides applied for corn production may have no option to switch to soybeans. Seed availability may also limit choice for some. Other factors, such as strict adherence to a crop rotation or landlord considerations may limit farmer choice when it comes to switching from corn to soybean plantings in a given year. Farm leases may contain specifications on crop rotations or even what crops may be grown. There may also be unwritten agreements between parties that limit the possibility of growing soybeans in successive years.

Producers that don't have these limitations may be considering the option of switching acres to soybeans and it will likely come down to expected profit. Field by field budgeting is recommended and with delayed planting the yield expectations change as we move later into the growing season. What will be the likely yields for a given farm for the two crop choices? A recent article, "Delayed Planting Effects on Corn Yield: A "Historical" Perspective" is a good starting point in evaluating potential yield loss due to late corn planting:

<https://agcrops.osu.edu/newsletter/corn-newsletter/2019-12/delayed-planting-effects-corn-yield-%E2%80%9Chistorical%E2%80%9D-perspective>

A recent article highlighting faculty in the College of Food, Agricultural and environmental Sciences always provides valuable insight into the possible yield swings related to late plantings of corn and soybeans:

<https://cfaes.osu.edu/news/articles/late-start-planting-might-not-hurt-yields-much>

Looking at some simple scenarios may get your budgeting process moving for your own fields. These scenarios are based on the 2019 crop enterprise budgets available online at: <https://farmoffice.osu.edu/farm-management-tools/farm-budgets>

Scenario 1 – Yield prospects remain unchanged, new estimated revenue based on today's markets:

Corn –	170.2 bu/a & 4.00/bu
Returns Above Variable Costs	\$293
Soybeans –	51.5 bu/a & 7.90/bu
Returns Above Variable Costs	\$207

Price changes in the last 3 weeks have been favorable to corn and shows some advantage to corn with these assumptions using OSUE Enterprise Budgets.

Scenario 2 – Corn yield 13% lower (per OSU Agronomy Guide, planting date 5-22 through 5-27), soybean yields remain unchanged, new estimated revenue based on today's markets:

Corn –	148 bu/a & 4.00/bu
Returns Above Variable Costs	\$227

Soybeans –	51.5 bu/a & 7.90/bu
Returns Above Variable Costs	\$207

The choice becomes closer as we see corn still outperforming soybeans (barely) in Returns Above Variable Costs.

Scenario 3 – Corn yield 13% lower (per OSU Agronomy Guide, planting date 5-22 through 5-27), soybean yields 5% lower, soybean seed costs higher due to higher seeding rate (additional 30,000 seeds per acre planted) for late planted soybeans, new estimated revenue based on today's markets:

Corn –	148 bu/a & 4.00/bu
Returns Above Variable Costs	\$227

Soybeans –	48.9 bu/a & 7.90/bu
Returns Above Variable Costs	\$175

This choice again favors corn as the lower soybean yield due to late planting and additional seeding costs make the choice of corn somewhat stronger compared to Scenario 2.

The recent announcements of another round of Market Facilitation Payments and changes to Prevented Planting Coverage due to the pending Disaster Aid Bill may add further complexity to this choice. As planting is delayed further into June the potential lower yields of both corn and soybeans due to a later planting window will tend to favor soybeans. These simplified scenarios are just examples and farmers should budget for the different yield, price and cost combinations based on their own numbers

Prevent Plant- What's That Again?

By: Eric Richer & Chris Bruynis, OSU Extension Educators

Source: <https://u.osu.edu/ohioagmanager/2019/05/23/prevent-plantwhats-that-again/>

Wet conditions in Ohio and the Eastern Corn Belt has slowed (halted?) planting progress for Ohio producers. According to the May 20th Crop Progress Report by USDA National Ag Statistics Service, Ohio had only 9% corn planted. Surprisingly that was 'double' what was planted the week before and well behind the 5-year average of 62% planted. In 2018, Ohio was 69% planted by this report date.

Certainly, the Prevent Plant (PP) crop insurance tool has become a hot topic this year. Many of you have had the chance to attend prevent plant meetings or speak with your crop insurance agent. If not, we will try to briefly summarize your options and strongly suggest you talk to your agent or utilize one of the calculators (see associated "Decision Tools" article by Sam Custer) to determine which option best suits your farm operation.

Your first option is to plant the corn crop by June 5, the final plant date for corn (or June 20 for soybeans). Up until the final plant date, you are eligible for your full guarantee at the level you have selected. For example, 80% coverage x 170 bu/ac APH x \$4.00 = \$544/acre. If you elect to plant corn after June 5, you will incur a 1% reduction in your guarantee up through June 25, at which time your corn will crop will become uninsurable. For example, if you plant corn on June 8, the guarantee formula (170 APH, 80% coverage) would be: 80% x 170 bu/ac x \$4.00 x 97% = \$528/acre. Planting dates need to be recorded, as these rules apply on field-by-field and acre-by-acre basis.

Secondly, you can elect to switch your intended corn acres to soybean acres. You will not have the option to file a prevented plant claim (unless you arrive at June 20 unable to plant soybeans). You will be charged for

the soybean insurance premium, not the corn premium. The decision tool referenced earlier will be helpful here as this is not an easy decision. June weather (local and regional), supply/demand economics, trade policy and input options increase the complexity.

Your last option is to file for Prevent Plant, assuming you did not get corn planted by June 5. The mechanics of prevented plant deserve a review to ensure understanding. Prevent plant covers Yield Protection (YP), Revenue Protection (RP) and Revenue Protection with Harvest Price Option policies and references the February new crop corn pricing period (aka projected price). The projected price for 2019 corn is \$4.00/bu and \$9.54/bu for soybeans. A corn policy has a 55% Prevent Plant guarantee (buy-up available to 60%) and soybeans a 60% guarantee (with buy-up available to 65%). In order to further be eligible for Prevent Plant, at least 20 acres or 20% of that unit must not get planted (the lesser of the two). Prevented Plant does not affect your yield history as long as you do not plant a second crop. So a quick example (80% coverage, 170 bu/ac APH) for prevented plant corn would be: $80\% \times 170 \text{ bu/ac} \times \$4.00 \times 55\% = \$299/\text{acre}$.

To be sure, there are costs besides the premium that are associated with Prevent Plant. Are there 'restocking fees' associated with returned seed or other inputs? What are the year-long weed control costs? If utilizing cover crops, what will their cost be? What are my land costs or how do I address my land costs? Do I need to pay labor & management costs even though the land wasn't 'farmed'? And finally, are their opportunity costs (marketing) missed because of taking Prevent Plant? We do not have space in this article to address these but they are things to be considering.

The reporting of Prevent Plant acres-should you elect that option-is quite simple. First, the total acres of Prevent Plant corn that you can file in 2019 can be no greater than the greatest number of acres of corn you reported in any of the previous four years (2015-2018). To report Prevent Plant acres, you would first need to turn in a notice (starting June 6) to your insurance agent. Then report your Prevent Plant to USDA Farm Service Agency to get it on your acreage report. Then you will need to work with your adjuster to finalize the claim, which will generally be paid within 30 days.

Prevented planting insurance payments can qualify for a 1 year deferral for inclusion in income tax. You can qualify if you meet the following criteria:

- You use the cash method of accounting.
- You receive the crop insurance proceeds in the same tax year the crops are damaged.
- You can show that under your normal business practice you would have included income from the damaged crops in any tax year following the year the damage occurred.

The third criteria is the sometimes the problem. Most can meet the criteria, although if you want reasonable audit protection, you should have records showing the normal practice of deferring sales of grain produced and harvested in year 1 subsequently stored and sold in the following year.

There are many additional questions that we could address in this article but these are the basic options to guide your thought process...unless Mother Nature just won't cooperate!

Prevented Planting Decision Tools

By Sam Custer, OSU Extension Educator

Source: <https://u.osu.edu/ohioagmanager/2019/05/23/prevented-planting-decision-tools/>

We have reviewed two prevented planting decision tools that can serve as a resource in your decision making process with your crop insurance agent. Both tools also provide resources for determining replant decisions.

In a recent Farmdocdaily article Schnitkey, G., C. Zulauf, K. Swanson and R. Batts. "[Prevented Planting Decision for Corn in the Midwest](#)." *farmdoc daily* (9):88, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, May 14, 2019 they highlighted their decision tool.

The farmdoc tool can be used to make calculations for expected returns from three options: 1. Take a prevented planting payment and not plant a crop to be harvested or grazed. 2. Plant corn. 3. Plant another crop. The *farmdoc Prevented Planting Module* is used to aid in making calculations for each alternative.

The *Prevented Planting Module* is part of the *Planting Decision Model*, a Microsoft Excel spreadsheet within the FAST series available for download on *farmdoc* ([here](#)). The specific spreadsheet is available ([here](#)). Iowa State also has an article and tool that can be found at <https://www.extension.iastate.edu/agdm/crops/html/a1-57.html>.

The Iowa State model can be used to determine three options also: 1. Go ahead and plant the original crop. 2. Plant an alternative crop 3. Abandon the acres, and plant a cover crop. The Iowa State model is designed specifically for Iowa but allows you to use your numbers. The farmdoc model contains Ohio data but also allows you to use your specific numbers.

Forage Options for Prevented Planting Corn & Soybean Acres

By Stan Smith, OSU Extension

<https://agcrops.osu.edu/newsletter/corn-newsletter/2019-15/forage-options-prevented-planting-corn-and-soybean-acres>

Today, as we sit here on May 28, we know three things for certain:

- Ohio has the lowest inventory of hay since the 2012 drought and the 4th lowest in 70 years.
- Ohio's row crops will not get planted in a timely fashion this year.
- Despite improvement in the grain markets over the past week or two, for those with coverage, Prevented Planting Crop Insurance payments may still yield more income than growing a late planted corn or soybean crop this year

Prevented planting provisions in the USDA's Risk Management Agency (RMA) crop insurance policies can provide valuable coverage when extreme weather conditions prevent expected plantings. On their website, RMA also says "producers should make planting decisions based on agronomically sound and well documented crop management practices."

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 against the reality that financially and agronomically it might be a more 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.



Grazing oats planted on Prevented Planting acres in very late fall is an excellent alternative for harvesting this cover crop.

Let's start at the beginning. To an insured crop producer, what is Prevented Planting?

RMA says "Prevented Planting is a failure to plant an insured crop with the proper equipment by the final planting date designated in the insurance policy's Special Provisions or during the late planting period, if applicable." The most common cause for the failure to plant a crop in a timely fashion is adverse weather. An insured producer in Ohio can elect to receive a Prevented Planting payment for corn on June 6th and/or June 21st on soybeans if adverse weather has prevented the crop from being planted by then.

You may ask why I'm discussing this 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 grazed or harvested without affecting the PP payment beginning November 1. It may take some creativity to turn cover crops into feed beginning November 1, but considering that inventory of quality hay in Ohio is so low right now, it merits consideration.

Before we go further, if you're considering planting a cover crop that you might harvest for forage on PP acres, check with your crop insurance agent and Farm Service Agency for any restrictions you might need to consider.

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 much of Ohio remain too wet for planting them today, most fields are plagued with weeds that have yet to be controlled, and in many cases fields are still rutted from last fall's harvest. And, if forage and not grain is the goal, 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 lots of 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 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 to be repaired, manure to be hauled, and weeds to be controlled. Based on our experience beginning in 2002 in Fairfield County with oats planted mid to late summer, if you can utilize a forage for grazing, baled hay, or silage 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.

Based on experiences with summer planted oats, Curt Stivison, who initiated this work in Ohio, and I offer these suggestions:

- Optimum planting date for oats from the perspective of forage yield is not until the first of August. Early August plantings also have resulted in the highest total amount of TDN produced per acre. Later plantings will be slightly higher in quality, but typically not enough so to offset the yield advantage of an August 1 planting. While being more conducive to a mechanical harvest in early Fall, planting in early to mid July reduces both yield and quality. The earlier oat plantings also have exhibited more susceptibility to rust.
- Regardless the planting date, or variety, no-tilled seeding rates of from 80 to 100 pounds of oats have consistently resulted in optimum forage yields.
- Optimum nitrogen application rate has been 40 to 50 pounds per acre. This application not only produces the highest yields, but at current values of nitrogen, it's also the most cost effective rate. Higher rates of nitrogen actually depressed yields in our 2008 plots.
- Over the years, many growers have been successful using bin run 'feed' oats originating in Canada. Most of the concerns with utilizing 'feed' oats are obvious: no germination test, and the potential for bringing some weed seed onto the farm. Another problem we experienced once was that a few of the Canadian oats in the "feed bin" were apparently winter oats. After getting started in the fall, they went dormant over winter, and then elongated in the spring much like winter wheat does after breaking dormancy.

- The optimum combination of productivity and quality of August planted oats arrives 60 to 75 days after planting. Apparently due to the heat, oats planted in July mature more quickly and thus, rapidly decline in quality beginning 50 to 60 days after planting in most years.
- Oats harvested 50-60 days after planting and while still in the boot stage of maturity may offer some regrowth that could be grazed.
- A weed control application of glyphosate is a necessary and cost effective practice prior to oat planting.

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 typically beginning November 1 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.

Dry baling oats in the fall has been done around Ohio, but it's a challenge considering that oats will dry less than half as fast a grass hay. Cut in November, oats typically require at least two weeks or more to cure. Wet wrapping them is an expensive alternative. Using an in-line bale wrapper/tuber is a little less expensive per ton than individually wrapped bales if the equipment is available locally.

Oats won't die until temperatures have been in the mid 20's for several hours. That means they'll still be green and alive in December most years in Ohio. When they finally freeze, and if it's not a wet winter, growers may be able to let them die and dry while standing, get a few days of dry frozen weather in January, mow them, rake them and quickly bale them after they've essentially cured while still standing.

In Canada, growers have sprayed their oats with glyphosate and let them dry out while standing. Then, after a few weeks and at a time when they get a dry week, they mow, rake and bale them all in a day or two. Locally, that's been done once that I know of which allowed the oats to be baled in late December and January.

If grazing the standing oats is not an opportunity, perhaps chopping and ensiling oats is the best alternative for harvest. This offers several advantages over baling or wet wrapping. Obviously the issue of curing the plants for dry harvest becomes a moot point. Chopping and ensiling into either a permanent structure or bags is also likely less expensive than wet wrapping individual bales. Perhaps even better, as detailed by Francis Fluharty a few years ago, chopped forages are 30 to 60% more digestible than long stem forages.

Admittedly chopping and ensiling is likely more expensive than rolling dry hay, but when you consider you get essentially no storage losses, the timeliness of harvest which is afforded, and the more digestible feed which results, it's a good alternative. And if you're able to bunk feed the chopped and ensiled oats, there will be no "bale ring" feeding losses to be experienced.

Keep in mind, if you plan to accept a full Prevented Planting Crop Insurance payment, cover crops can't be harvested or grazed until November 1. For more information on making the Prevented Planting decision, you may review this recent post from the University of Illinois ***farmdocdaily*** entitled [Prevented Planting Decision for Corn in the Midwest](#).

During the winter of 2013 Ohio Forage and Grassland Council Annual Meeting, I was invited to share the following presentation, which 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 on insured Prevented Planting acres!

For additional information on beef cattle production in Ohio, visit: <http://u.osu.edu/beef/>

Current Weed Issues II: Revised Herbicide Management Strategies for Late Planting

By: Mark Loux, OSU Extension Weed Specialist

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-15/current-weed-issues-ii-revised-herbicide-management-strategies>

We're running about a month behind in many cases, and with respect to weeds we are a month later than normal in implementing herbicide programs. The most important thing to know about this is that we are well into the period of summer annual weed emergence, most of which occurs between early May and the end of June, which overall shortens the period of weed control that we need and allows earlier application of POST herbicides. There are some advantages to this - here's what it means for those fields just planted or that will still be planted within the next couple weeks:

Because we are this late, the burndown has become a major part of what is usually our in-season herbicide program, and is taking care of a good portion of the summer annuals that residual and POST herbicides would usually control. The big glaring issue at this time is nasty burndown situations, and we provided some suggestions for this in previous articles. Lots of pretty yellow fields due to cressleaf groundsel. Keep in mind that this and other winter annuals that have flowered are ending their life cycles, so they have died or started dying on their own anyway. Focus should be more on the large giant ragweed, lambsquarters, marehail, etc that are present. We are also late enough that waterhemp is part of the burndown mix in some fields. Don't skimp.

Herbicide programs do not have to last as long in crops planted late. When we plant in early May, we need an herbicide program that controls weeds from then until the end of June or so, which is in part why we use residual herbicides and frequently apply POST herbicides 5 to 6 weeks after planting. Applying the POST too early in a crop planted in early May introduces the risk of poor control of weeds that emerge soon after that application, before the crop is developed enough to control them on its own. This is much less of an issue with a late-planted crop. Since summer annual weed emergence tapers off as we move through June, the POST herbicides can be applied much sooner after planting without sacrificing control. Planting soybeans this late can therefore allow earlier POST applications when weeds are small – more like 3 weeks after planting. This can help minimize carryover concerns with fomesafen, and also provide a wider window to look for the right conditions to apply dicamba (see below).

In studies of reduced-rate POST applications that we conducted a couple decades ago, planting soybeans in late May or early June allowed us to use earlier POST applications (e.g 21 days after planting) at lower rates and still maintain control. There were just fewer weeds emerging after planting and the duration of weed emergence after planting was also shorter. It was not possible to achieve this in early-planted soybeans – we needed either two applications at reduced rate or a later application at full rates for control.

One issue with later POST sprays is the potential for herbicide carryover from products such as mesotrione and fomesafen (Flexstar, etc), among others. Fomesafen carryover has been rare in the state but risk increases with later applications, especially if rainfall subsequently becomes limiting. Where glyphosate and fomesafen are being combined in a late POST application to control ragweeds, it may become necessary to replace the fomesafen with lactofen (Cobra/Phoenix) as applications move into July. Our research indicates that the lactofen products are less effective than fomesafen in this mix by about 10 to 20%.

Another concern would be POST applications of dicamba on Xtend soybeans shifted later into the hotter weather that occurs as we move from June into July. The consensus of the weed science community is that both of the approved dicamba formulations have potential to move via volatilization, and the risk of this would increase with increasing temperatures and increased frequency and duration of inversions. The current long-range forecast also indicates a trend for hotter than normal temperatures

as we move into mid-summer. Current labels allow application through 45 days after planting or prior to the R1 stage, whichever occurs first. For soybeans planted early, the 45-day limit is often the main determinant, but later planted soybeans progress through growth stages more rapidly so the R1 stage may be the more frequent limitation. Movement of dicamba onto other types of soybeans later in summer also has increased potential to reduce yield, since long-term effects of exposure to dicamba are more severe when soybeans have flowered. Bottom line here is that there is less weather and time suitable for dicamba application with late-season applications, and movement and injury that does occur can have more substantial impact. Planting within the next couple weeks and looking for the right conditions to spray starting about June 21 would provide more flexibility with regard to weather and weed size than deciding to wait until about July 10 to spray when it's hotter and weeds are already large.

Can residual herbicides be omitted in late-planted soybeans? Maybe. Reduced weed populations could make this more feasible, but we really hesitate to recommend it. Omitting residuals is never the right thing to do in fields with a history of weed control problems or high weed populations, or those with waterhemp and Palmer amaranth. One advantage of omitting residuals would less risk of antagonism with burndown herbicides in mixtures. Applying certain soybean residuals in June can increase risk of carryover. The effectiveness of current soybean herbicide-tolerance trait systems makes this more of a possibility, but lack of residuals generally increases risk of problems and selection for resistant weeds, and makes timing of POST herbicides more critical. The latter point is important because with a compressed season, applicators can be required to cover a lot of acres within a short period of time. Keeping residuals in the program allows for more flexibility overall.

In late-planted corn, residual herbicides may be effective enough to reduce need for POST herbicides. Or the residuals could be applied early POST, after the rush to plant is over (keeping rotation guidelines in mind). Some corn fields are already in this situation, planted without any herbicide applied yet. The table below shows restrictions on POST use of residual corn herbicides (source – U of Illinois). This information can also be found in the herbicide descriptions in the [Weed Control Guide](#), and is also summarized in [this PSU newsletter article](#) and [this table](#) from the MSU weed control guide. Reminder that use of 28% UAN as a spray carrier is prohibited for POST application of herbicides with the exception of Degree Xtra.

Table 1. Maximum Corn Size for Postemergence Applications of Soil-Residual Herbicides

Herbicide	Maximum Corn Size for Broadcast Application
Prequel, Princep, Sharpen, Verdict	<i>Before corn emergence</i>
Balance Flexx, Corvus, Instigate	2 leaf collars
Anthem Maxx	4 leaf collars
Bicep Lite II Magnum, Cinch ATZ, Cinch ATZ Lite, Parallel Plus, Stalwart Xtra	5 inches ^a
Breakfree, Breakfree ATZ, Breakfree ATZ Lite, Degree Xtra, FulTime NXT, Harness, Harness Max, Harness Xtra, Keystone NXT, Keystone LA NXT, Resicore, SureStart II/TripleFLEX II, Surpass NXT	11 inches
Acuron, Atrazine, Bicep II Magnum, Lumax EZ, Lexar EZ, Outlook^b, Resolve DF	12 inches
Hornet WDG, Python WDG	20 inches (V6) ^c
Resolve Q	20 inches (through V6)
Armezon Pro, Callisto, Prowl H₂O, Zemax	30 inches
Dual II Magnum, Cinch, Me-Too-Lachlor II, Stalwart C, Parallel	40 inches
TriCor	Prior to tassel emergence
Zidua SC	V4

^aAll of these products are labeled for directed applications to corn up to 12 inches tall.

^bOutlook is labeled for layby applications to corn up to 36 inches tall.

^cHomet is labeled for directed application to corn up to 36 inches tall.

Delayed Soybean Planting- A Yield Perspective

By: Laura Lindsey, OSU Extension Soybean Specialist

<https://agcrops.osu.edu/newsletter/corn-newsletter/2019-15/delayed-soybean-planting-yield-perspective>

Across the state, soybean planting is still on-hold due to continued wet weather. A few weeks ago, I wrote an article on recommendations for June-planted soybeans: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-12/recommendations-late-planted-soybeans> You can also find recommendations for late-planted soybeans in the Ohio Agronomy Guide available to download as a pdf here: <https://stepupsoy.osu.edu/soybean-production/ohio-agronomy-guide-15th-edition> (click on the picture of the guide to download).

I think June-planted soybeans still have a great deal of yield potential; however, it will depend on how the rest of the year turns out. (Will there be water limitations during pod-setting and seed fill? Will we have an early frost?)

In Clark County at the Western Agricultural Research Station (WARS), we have observed a 0.6 bu/acre/day reduction in soybean yield (see Figure 1). Soybeans planted on July 2, 2013 yielded close to 60 bu/acre and soybeans planted on July 1, 2014, yielded close to 50 bu/acre. Interestingly, in Wood County at the Northwest Agricultural Research Station

(NWARS) in 2014, yield was just over 50 bu/acre regardless of planting date, which spanned from May 8 to June 18. I've summarized some of our other late-planted soybean yield data in the following table.

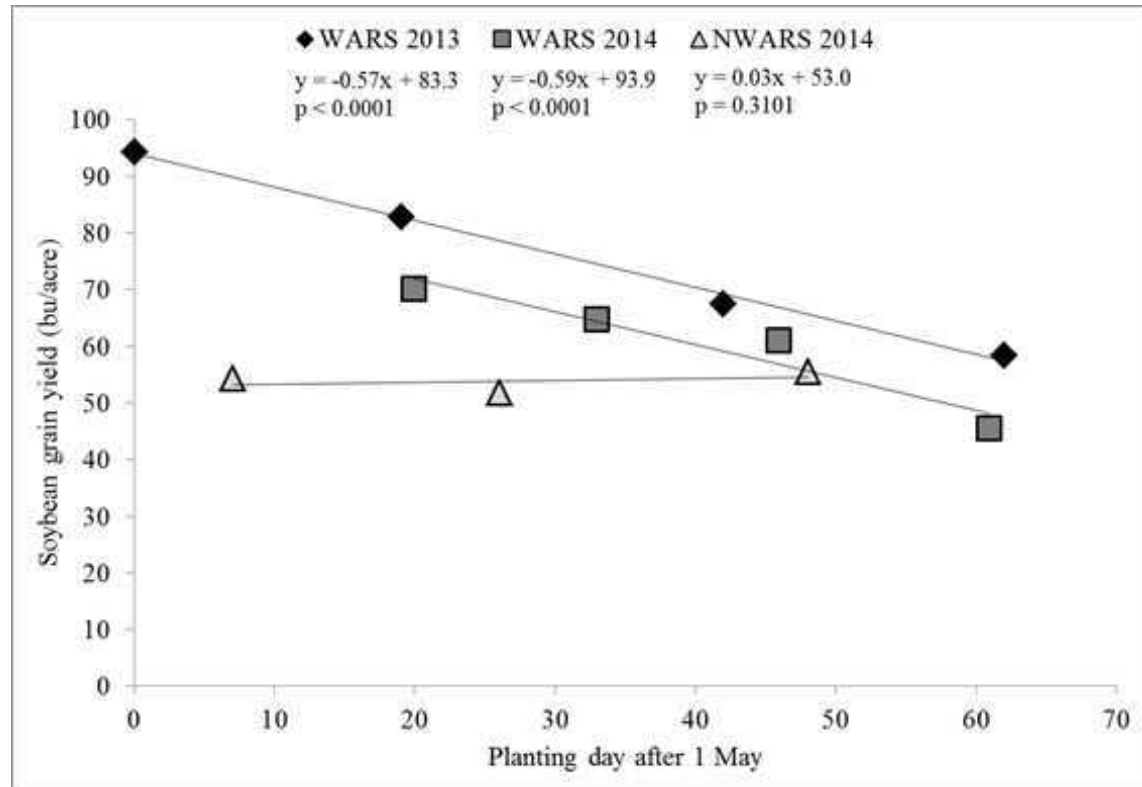


Figure 1. Effect of soybean planting date on soybean grain yield at the Western Agricultural Research Station (WARS) (Clark County) in 2013 and 2014 and the Northwest Agricultural Research Station (NWARS) (Wood County) in 2014.

Planting date	County	Average yield (bu/acre)
June 1, 2011 (performance trial)	Preble County	64-71
June 1, 2016 (relative maturity trial)	Clark County	60
June 3, 2011 (performance trial)	Mercer County	57-66
June 4, 2011 (performance trial)	Delaware County	43-56
June 4, 2017 (performance trial)	Sandusky County	57-58
June 5, 2011 (performance trial)	Erie County	59-65
June 6, 2017 (relative maturity trial)	Wood County	50
June 6, 2011 (performance trial)	Henry County	54-56
June 7, 2011 (performance trial)	Fayette County	58-72
June 7, 2011 (performance trial)	Mercer County	53-55
June 8, 2017 (relative maturity trial)	Clark County	60-65
June 9, 2016 (relative maturity trial)	Wayne County	68
June 9, 2017 (relative maturity trial)	Wayne County	55
June 13, 2016 (relative maturity trial)	Wood County	58-61
June 26, 2018 (double crop trial)	Clark County	48
June 29, 2018 (double crop trial)	Wayne County	41
June 29, 2017 (double crop trial)	Clark County	39-47
July 11, 2016 (double crop trial)	Clark County	43

Speeding Up Hay Drying

By Mark Sulc, OSU Extension Forage Specialist

Source:

<https://agcrops.osu.edu/newsletter/corn-newsletter/2019-15/speeding-hay-drying>

Author's note: Most of this article is adapted with permission from an article published in Farm and Dairy on 2nd June 2010, available at <http://www.farmanddairy.com/top-stories/make-hay-when-sun-shines-but-tak....> It certainly applies this year.

Many forage producers across Ohio have suffered severe forage stand losses; however, there are areas where the stands have survived and those are ready for harvest. Unfortunately, recent and forecasted rains are preventing the first harvest of many of those acres. Despite the need to harvest now for quality forage, I strongly urge patience in waiting for soils to firm up before attempting to make our first cutting of hay, because harvesting on soft soils does long-term damage to future productivity.

Once the soils are firm enough, there are several proven techniques that can speed up the hay drying process to take the most advantage possible with any sunny days we do get.



Haylage vs. hay. Consider making haylage/silage or balage instead of dry hay. Since haylage is preserved at higher moisture contents, it is a lot easier to get it to a proper dry matter content for safe preservation. Proper dry matter content for chopping haylage can often be achieved within 24 hours or less as compared with 3 to 5 days for dry hay.

Proper dry matter content for silage ranges from 30 to 50% (50 to 70% moisture) depending on the structure used. Wrapped balage should be dried to 40 to 55% dry matter (45 to 60% moisture). Compare that to dry hay that should be baled at 80 to 85% dry matter (15 to 20% moisture), depending on the size of the bale package. The larger and more dense the dry hay package, the dryer it has to be to avoid spoilage.

Mechanically condition the forage. Faster drying of cut forage begins with using a well-adjusted mower-conditioner to cause crimping/cracking of the stem (roller conditioners) or abrasion to the stems (impeller conditioners). At least 90% of the stems should be cracked or crimped with roller conditioners or should show some mechanical abrasion when using impeller conditioners.

Some excellent guidelines for adjusting these machines can be found in an article by Dr. Ronald Schuler of the University of Wisconsin, available online at fyi.uwex.edu/forage/harvest/.

Maximize exposure to sunlight. I once heard someone say "You don't dry your laundry in a pile, so why do you expect to dry hay that way?" **Exposure to the sun is the single most important weather factor to speed drying.** The trick is to expose to sunshine as much of the cut forage as possible. The swath width should be about 70% of the actual cut area. The mowers on the market vary in how wide a windrow they can make, but even those that make narrow windrows have been modified to spread the windrow wider. Details can be found in articles at the Univ. of Wisconsin website mentioned above (see especially "*Getting the Most from the Mower Conditioner*" by Kevin Shinnners).

Another way to spread out and aerate the crop for faster drying is with a tedder. Tedders are especially effective with grass crops but can cause excessive leaf loss in legumes if done when the leaves are dry. Tedders can be a good option when the ground is damp (as this year), because the crop can be mowed into narrow windrows to allow more ground exposure to sunlight for a short time, and then once the soil has dried some the crop can be spread out with the tedder.

When making haylage, if drying conditions are good, rake multiple wide swaths into a windrow just before chopping. For hay, if drying conditions are good, merge or rake multiple wide swaths into a windrow the next morning when the forage is 40 to 60% moisture to avoid excessive leaf loss. Research studies and experience have proven that drying forage in wide swaths can significantly speed up drying. Faster drying in wide swaths results in less chance of rain damage and studies by the University of Wisconsin showed that wide swaths (72% of the cut width) result in lower NDF and higher energy in the stored forage.

Consider desiccants. Desiccants are chemicals applied when mowing the crop that increase the drying rate. The most effective desiccants contain potassium carbonate or sodium carbonate. They are more effective on legumes than grasses and most useful for making hay rather than silage or balage. **Desiccants work best under good drying conditions, but don't help much when conditions are humid, damp, and cloudy.** Consider the weather conditions before applying them.

Consider a preservative. Sometimes the rain just comes quicker than we have time for making dry hay. As mentioned above, making haylage helps significantly with this. A second option is to use a preservative. The most effective preservatives are based on propionic acid, which is caustic to equipment, but many buffered propionic preservatives are available that minimize that problem. Preservatives inhibit mold growth and allow safe baling at moisture contents a little higher than the normal range for dry hay. Carefully follow the preservative manufacturer's directions and application rates for the hay moisture content at baling.

Watch wet bales carefully! If hay is baled at higher moisture contents that are pushing past the safe limits, keep a close watch on them for two to three weeks. Use a hay temperature probe and monitor the internal temperature of the hay during the first three weeks after baling.

Every year someone's barn burns down because of spontaneous combustion of wet hay. So if hay is on the wetter side, keep it outside or in a well-ventilated area. Don't stack wet hay, because that prevents the heat and moisture left in the hay from escaping.

It is normal for hay to go through a "sweat" in the few days after baling. Internal temperatures of 110 F in the first five days after baling are quite common in our region and are not a big concern. Hay bale temperatures of 120 to 130 F will likely result in mold growth and will make the protein in the hay less available to animals. While those temperatures are not high enough to cause hay fires, the concern is if the mold growth continues and pushes temperatures upward into the danger zone.

If the temperature in the hay continues to rise, reaching 160 to 170 F, then there is cause for alarm. At those elevated temperatures, other chemical reactions begin to occur that elevate the temperature much higher, resulting in spontaneous combustion of the hay in a relatively short period of time.

Hay fires can be avoided by careful attention to the management practices outlined above along with cooperation from the sun. Let's hope for plenty of sunshine soon!

2019 Dairy Margin Coverage Program Sign-up Coming Soon

By: Dianne Shoemaker, Extension Field Specialist

Source: <https://u.osu.edu/ohioagmanager/2019/05/21/2019-dairy-margin-coverage-program-sign-up-coming-soon/>

Occasionally it is nice to catch a break...and breaks have been hard to find in the cow-milking business for a while now. So, put on your mitt because it is nearly time to play ball. The Farm Service Agency plans to open the sign-up period on June 17th for the newly renovated Dairy Margin Coverage (DMC) Program, re-named and re-configured in the 2018 Farm Bill. The changes you will see in the DMC Program attempt to fix some of the problems that rendered the Dairy Margin Protection Program largely ineffective until initial adjustments were implemented early in 2018.

Two of the biggest changes that will positively impact farms of all sizes include 1) adding 3 new margins, \$8.50, \$9.00 and \$9.50, at reasonable premiums, and 2) allowing farms with base production of more than 5 million pounds to make a second margin election for pounds over the first 5 million.

There are also opportunities to recover program participation net losses from 2014, 2015, 2016 or 2017. Repayment can be received either as cash (50% of the net loss), or by applying it to premiums for participation in the new program (75% of the net loss). What does this mean? If a farm purchased \$6.50 margin coverage in 2016, paid a premium of \$3,500 and received a total indemnity payment of \$500, they had a \$3,000 net loss. The farm can now choose to receive half the difference, or \$1,500 as a cash payment. The other option is to receive \$2,250, or 75% of the amount, as a credit toward premiums for Dairy Margin Coverage Program participation. If you participated in any or all of those years, you will receive notification from your Farm Services Agency office with your amounts and options.

So why should you step up to the plate? Just like 2018, when sign-ups were re-opened for the updated program, sign-ups for 2019 will open well after January, but participation will be retroactive to January 1. When the sign-up period opens on June 17th, we will know exactly what the margins will be for January (\$7.99), February (\$8.22), March (\$8.85), and April. Signups will end September 20th,

so you could wait and know what the actual margins are through at least July. As USDA announces new monthly margins, you can find them posted at <https://www.fsa.usda.gov/programs-and-services/Dairy-MPP/index>

No need to wait

For farms with up to 5 million pounds of base production, indemnity payments for January through March more than cover the premiums at the highest (\$9.50) margin.

Example:

Base milk: 5,000,000 lbs (about 200 cows)

Farm elects to cover 95% of their base, 4,750,000 pounds, or 47,500 cwt.

Coverage level selected: \$9.50 margin costing 15¢ per cwt

The program assumes that production is equal across months, or $47,500/12 = 3,958$ cwt per month. Because we know the January, February, and March margins, we can calculate the current indemnity payments. These payments are made on the difference between the purchased margin coverage level (\$9.50 in this example) and the announced margin, times the monthly cwts covered:

Jan	$\$1.51 \times 3,958 \text{ cwt} = \$5,977$
Feb	$\$1.28 \times 3,958 \text{ cwt} = \$5,066$
March	$\$0.65 \times 3,958 \text{ cwt} = \underline{\$2,573}$
Total payments	$= \$13,616$

Less

6.2% Sequestration	= \$ 844
Administration fee	= \$ 100
Premium	= <u>\$ 7,125</u>
Difference	= \$ 5,547 paid to the farm

Since the signup is retroactive to January 1, we know that not only will the known indemnity payments cover all program costs; we also know there will be net positive dollars to help pay a few bills. How many total net dollars for 2019 is unclear and changing. Two weeks ago, projections indicated that there would be announced margins less than \$9.50 well into the summer. If recent milk market rallies hold and show up in milk checks, then there could be few or no further indemnity payments. We all hope that that will be the case!

Second election for base pounds over 5 million

A major change that impacts farms with more than 200 cows, is the opportunity to make a margin selection for the first 5 million pounds of base milk, and a *different* margin selection for any base pounds over 5 million pounds. The Tier 2 premiums for the > 5 million pounds are substantially higher than premiums for the first 5 million pounds (Table 1). To be allowed to make a second selection, the farm must purchase coverage at \$8.50, \$9.00, or \$9.50 for the first 5 million base pounds (Tier 1 milk and premiums).

Table 1. Tier 1 Margins and Premiums for the Dairy Margin Protection Program (2014 – 2018), and Dairy Margin Coverage Program (2019 – 2022)

Tier I Premiums



	2014	2018	2019
Margin	< 4 million pounds	< 5 million pounds	< 5 million pounds
\$4.00	None	None	None
\$4.50	\$0.01	None	\$0.0025
\$5.00	\$0.025	None	\$0.005
\$5.50	\$0.04	\$0.009	\$0.03
\$6.00	\$0.055	\$0.016	\$0.05
\$6.50	\$0.09	\$0.04	\$0.07
\$7.00	\$0.217	\$0.063	\$0.08
\$7.50	\$0.30	\$0.087	\$0.09
\$8.00	\$0.475	\$0.142	\$0.10
\$8.50			\$0.105
\$9.00			\$0.110
\$9.50			\$0.150



Tier 2 premiums are the same as Tier 1 premiums for \$4.00, \$4.50, and \$5.00 margins (Table 2). The premium for the \$5.50 Tier 2 margin costs more than three times as much as the corresponding Tier 1 premium, with premiums increasing exponentially until they reach \$1.813 for the \$8.00 margin. The higher coverage levels quickly become cost prohibitive and are unlikely to make sense for most farms. However, with the new 2-election option, farms with base production of more than five million pounds should seriously consider maximizing coverage in Tier 1 and electing the \$4.00, \$4.50, or \$5.00 margin coverage on their Tier 2 base pounds for 2019.

Table 2. Margins and Tier 1 and Tier 2 Premiums, Dairy Margin Coverage Program, 2018 Farm Bill

Dairy Margin Coverage Premiums

Margin	Tier 1 < 5 million pounds	Tier 2 > 5 million pounds
\$4.00	None	None
\$4.50	\$0.0025	\$0.0025
\$5.00	\$0.005	\$0.005
\$5.50	\$0.03	\$0.10
\$6.00	\$0.05	\$0.31
\$6.50	\$0.07	\$0.65
\$7.00	\$0.08	\$1.107
\$7.50	\$0.09	\$1.413
\$8.00	\$0.10	\$1.813
\$8.50	\$0.105	-
\$9.00	\$0.11	-
\$9.50	\$0.15	-

Long-term commitment = 25% off premiums

Another option for farmers to consider as they sign up this year is the 25% premium discount option. There is a large string attached to the 25% discount, as you have to commit to your election for 5 years.

Decision Tool

How to make a decision? Particularly if you are considering the five-year commitment, use the decision tool developed by Mark Stephenson and crew at the University of Wisconsin. The new DMC Decision Tool, which incorporates the changes legislated in the 2018 Farm Bill is now up and running at <https://dairymarkets.org>. This is a very handy tool that allows farmers to enter their historic production (still starts with the highest of 2011, 2012, or 2013 production – verify your current production history with your FSA office) and explore the cost and potential returns of different coverage percentages and levels. It will lay out your costs for 2019 participation, expected payment, and also lay out the premium with the 25% discount and total 5-year cost if you want to consider that option.

There is also a button to plug in your MPP Premium Repayment amount supplied to you by your FSA office. It will tell you how much you could receive as a cash payment and how much of your current selection's premium would be covered if you chose that option. The decision tool's milk and feed price data is updated nearly daily, so you may receive different "expected payment" results depending on what the markets are doing.

OSU Extension and FSA offices will be working together and offering educational programs before and early in the sign-up period to review the changes and options for farmers. Look at the options for your farm. Batter up.

Coshocton County Ag & NR Needs Assessment- Your Input is Needed!

OSU Extension is conducting a formal Agriculture & Natural Resources Extension Educator for Coshocton. Farmers, landowners, and others involved in the agricultural industry are being asked to complete this 2-page survey. This survey will be used to help develop the framework of future Ag Extension programming here in Coshocton County. **Would you consider completing this survey?** (if you have already, thanks—no need to respond again) An on-line version of the survey can be accessed at go.osu.edu/coshoctonag. **Survey respondents will also have the opportunity to register to win a donated \$100 VISA gift card by completing the survey.**

A Coshocton County View of the 2017 Ag Census

By: David L Marrison

For Publication on May 22, 2019- The Beacon

Hello Coshocton County! The United States Department of Agriculture (USDA) conducts a Census of Agriculture every five years to view the status of agriculture across the United States. This information is used to design governmental policy and it really helps us look at the trends in agriculture.

While the Census was completed in 2017, it is a long process to finalize the report. In fact, the results were released just last month. The Census is one of the most detailed documents produced by the USDA. The Ohio version of the Ag Census alone is 726 pages long! I have had fun looking through this report and today I would like to share just a quick snap-shot of Coshocton County Agriculture.

Good news! We continue to gain farms as the 2017 Census reports that Coshocton County has 1,191 farms which is 69 or 11.4% more than in 2012. These farms have a total of 182,555 acres of cropland, woodland, and pastures which is a 7.5% increase in acreage. The average acres per farm is up 1.3% to 153 acres.

Over 2,100 individuals have a hand in managing our 1,191 farms of which 38% are female. Only 37% of our producers are classified as full-time farmers and the average age of our farmers is 54.4 years. Most of our farmers are not getting rich from their farms. The average net farm income is \$20,966. However, this is an

average. As I dug into the numbers, I discovered that 491 farms reported positive net income in 2017 with 700 or 58.7% reporting a net loss. That means there is a lot of variability with regards to net farm income from one operation to another.

Small farms are on the rise. Thirty-nine percent of Coshocton County operations farm under 9 acres with another 39% farming between 10 and 49 acres. That means 78% of our operations have 50 acres or less. Only 6% of our operations farm over 500 acres. With regards to sales from the farm, 47% of our farms sell less than \$5,000 worth of commodities. One area of growth to note is that we have added 21 organic farms in the past five years.

In the area of crop production, our farmers harvest 29,323 of hay, 27,894 acres of corn, 20,926 acres of soybean, 2,055 acres of wheat, 1,356 acres of silage, 384 acres of vegetables, over 100 acres of orchard and vineyards, and 64 acres of Christmas trees. We also have 39,674 acres in permanent pasture for our cattle to graze. Hay is the commodity which is the most common crop grown by most our farms as 720 farms or 60% raise hay. In comparison, our second leading crop, corn, is grown by only 20.8% of our farms.

With regards to animals, our Coshocton County has great diversity. You most likely find a cow on our farms as 542 or 45.5% have cattle. We have 21,413 head of cattle in Coshocton County which includes 8,196 mama beef (brood) cows, 3,237 milk cows, and 9,980 replacement beef & dairy animals. On any given day, you will also find a total of 899,730 meat chickens, 75,661 layer chickens, 70,578 pigs, 3,542 sheep & lambs, 1,844 horses, 1,286 goats, 130 turkeys, 102 donkeys, 96 alpaca, and 67 Llamas on farms across the county. Our bee industry also is also buzzing along as we now have over 40 farms raising 169 colonies of bees.

Our poultry sector is the one sector that continues to grow by leaps and bounds as over 7.2 million meat chickens are raised and sold each year here in Coshocton County. In fact, new barns have been added since the Census was conducted. So this number is already low. Besides poultry, our farmers market on the average 150,834 pigs, 9,896 cattle, and 820 goats each year. Our livestock industry is definitely a force here in Coshocton County.

The Census also tracks such things as machinery and equipment. Do you know that there are 2,668 tractors, 153 combines, 762 hay balers, and 1,471 farm trucks in Coshocton County? The Census estimates there is over \$116 million dollars of farm equipment in the county. It takes a lot of equipment to make farms go!

I just love the diversity of agriculture here in Coshocton County. It is amazing how we have a little bit of everything in our Agricultural Industry. This is just a quick example of the data which is found in the 2017 Census of Agriculture. If you want to dive into the numbers further, this report can be accessed at go.osu.edu/agcensus

To close today's column, I would like to share a quote from my friend Pastor Bill McMinm who stated, "If you cannot be content with less, you will never be happy with more." Have a good and safe Memorial Day!

Upcoming Events

June 21 Dairy Farm Bill Meeting