Kansas Farm Management Association

Building Strong Relationships…Producing Excellence

September 2017 E-Newsletter

To Plan Your Future - Know Your Numbers, Use Your Numbers

Kevin Herbel- KFMA Executive Director

Articles in this issue of the KFMA Newsletter discuss proactively assessing your income position to complete preliminary tax planning, as well as, examining your crop profitability and the lease arrangements you have in place. Do you know how your current income level compares with last year or other prior years? Do you know your cost of production and the profitability of the crop and livestock enterprises on your operation? Have you examined your lease arrangements to determine if they are equitable for you and your landlords? One of the research articles presented examines machinery management decisions. How do you make machinery related decisions on your operation? Do you understand your machinery costs and the impact of machinery replacement decisions on your financial position? Completing these activities effectively requires that you have accurate farm financial records and understand how to use those records to guide your decisions. Helping farm decision makers establish a good record keeping system and to utilize those records in managing their farm is central to the mission of the KFMA Program. Let us know if we can help you know your numbers and use those numbers to manage effectively today…and to plan your future.

Kevin

Preliminary Tax Planning Pays Large Dividends

Bob Kohman- North Central KFMA Economist

For many producers, it may seem as if September is far too early for any sort of end of year tax management planning. However, economists within the KFMA associations around the state of Kansas would beg to differ. As KFMA Economists make their way around to see their members for fall farm visits, they spend time reviewing records, recording crop production and acres, checking cattle counts and performing a host of other activities, but none may be more important than taking time to compare current gross farm income to what the previous year's tax return showed for final gross income.

As producers well know, gross farm income can swing wildly from year to year due to fluctuations in grain yields and prices. Margins in the feeder cattle industry change monthly if not daily and if you are not careful, your gross income can shoot much higher than expected. Conversely, normal operating expenses in a farming operation can be expected to stay somewhat steady year over year (within 3%) unless there has been a major change in the business such as increased or decreased farm acres or head number in a livestock enterprise. With this information in mind, producers appreciate having knowledge of exactly where their gross farm income currently stands. To calculate the gross income, it is important to have up-to-date farm records and a list of any other known income sources that the producer is aware of at that point in time. If the producer has backgrounding or purchased feeder cattle, make sure to figure the gross income using the following equation: Gross Income=Gross Sales- Purchase Price. This can also be used for any other sort of resale business that the farm is currently engaged. I also include known dollar amounts such as impending government payments for ARC/PLC. While most producers will not know for sure the exact dollar amount, the payment can be estimated from last year's payment with adjustments to each program for which they are enrolled.

Once the current year gross income has been calculated, you must use last year's tax return for further information. The first place in the return that should be found is line 9 of the Schedule F. This is the "gross income" line for the farm. However, this information alone is not enough to use for comparison of where this farm stands for the current year. There are several other critical pieces of information to use. First and foremost is line 6 on the 4562, Depreciation and Amortization form. Line 6 accounts for any 179 expense deduction that was used on the previous tax return to reduce farm income. This figure is an expense that is outside of "normal operating expense" and must be used to reduce previous year's gross farm income. The use of 179 has been a widespread tax management practice by big and small farms alike. Even though we are seeing less of this tool used, it is no less important to account for this expense when comparing gross farm income. So, take the gross farm income and subtract last year's 179 expense deduction to get the new amount that you can use for comparison.

At this point, you can do a general gross income comparison to last year's tax return figures and if we assumed that normal operating expenses would stay similar, we could get an idea of where the Schedule F would end up if today was the last day of the year and your gross income didn't change from this point. With all this said, it is important to review the 2 pages of the 1040 for other "non-farm" lines that could have an impact on the overall makeup of the farmers personal income tax return for the year. You should account for major changes in wages, machinery sales, pension/IRA rollovers, etc. After considering all the information available, it is a great time for economists to help our members to plan how much additional income (grain sales, cattle sales, etc.) they can take in between now and the official tax estimates that we will complete with each member in December.

I have found it to be very helpful for my members to have a target gross income to shoot for. If their gross income is in the ballpark of where it ended the previous year, we can find ways to manage their taxes after the tax estimate has been completed. I have seen several instances where a member's income shoots way beyond the previous year to the point where it cannot be managed effectively. These instances can be avoided by planning this many months in advance and especially before the beginning of fall harvest. If a farmer is approaching last year's gross income figure or has already exceeded it, it does not mean that they are not able to sell additional grain. However, it may be a good time to defer the grain into the next year or at least until December 15th when most tax estimates will be finished and a tax plan can be put into place for the remainder of the year.

While typically gross income issues are a concern for taxpayers who have had very good years on the farm, KFMA Economists like myself are seeing gross incomes to be much lower as prices have lowered and we are seeing production problems as well. With that said, this gross income tax management strategy can also be helpful in low income years. If a producer has grain or livestock that they have not sold and need additional income to effectively manage their tax return, knowing several months in advance can provide them with the opportunity to take additional income without the worry of making their gross income too high.

In conclusion, managing gross income during the September/October time period can be an effective way to manage your final tax bill at the end of the year. I would highly encourage each producer to take the time to check their figures with their KFMA Economist in order to avert a major tax disaster that cannot be undone once the end of the year has been reached.

Equitable Cropland Leases

Trenton Hargrave-North Central KFMA Economist

As crop profitability has decreased in the past few years, many farmers are looking at their leases and wondering if they are fair and if there are any changes that should be made. Most farmers are hesitant to approach their landlords with any changes, be it lowering cash rent or asking the landlord to pick up some expenses. Farmers know that even though margins are tight, everyone is still looking to add acres so they don't want to upset their landlords for fear of losing the ground. For this reason, we have looked at what makes up an equitable lease and what can possibly be looked at from the farmer's side to adjust the lease to make it more equitable and maybe more profitable.

The first thing we wanted to look at was with crop share leases, as that is still the main lease agreement in our association. We looked at how the four main inputs that are, or could be, shared in a share lease have changed as a percentage of total cost of production in the last 10 years. To get these numbers and others used throughout our study, we looked and our association's crop enterprise analysis for our five main crops the last 10 years—wheat, milo, corn, soybeans, and double crop soybeans. The inputs we looked at were crop insurance, fertilizer, chemical, and seed. Figure 1 shows how these inputs have changed. The main takeaway is that while the dollars of fertilizer expense has been steady to decreasing over the last few years, as a percentage of total expenses, fertilizer has been on a steady decrease over the last 10 years. Both chemicals and seed have been on a steady increase, making these costs have more of an effect on per acre profitability. The percentage of cost for crop insurance has, effectively, been cut in half. When you hear that the cost has been cut in half at first it sounds good, but when you realize that the reason it has been cut so drastically is because the insurance is covering fewer dollars/acre, it makes you wish that it had doubled, not cut in half. Even though these individual inputs have changed over the last 10 years, together they have been fairly steady, making up about 35% of the total cost of production.

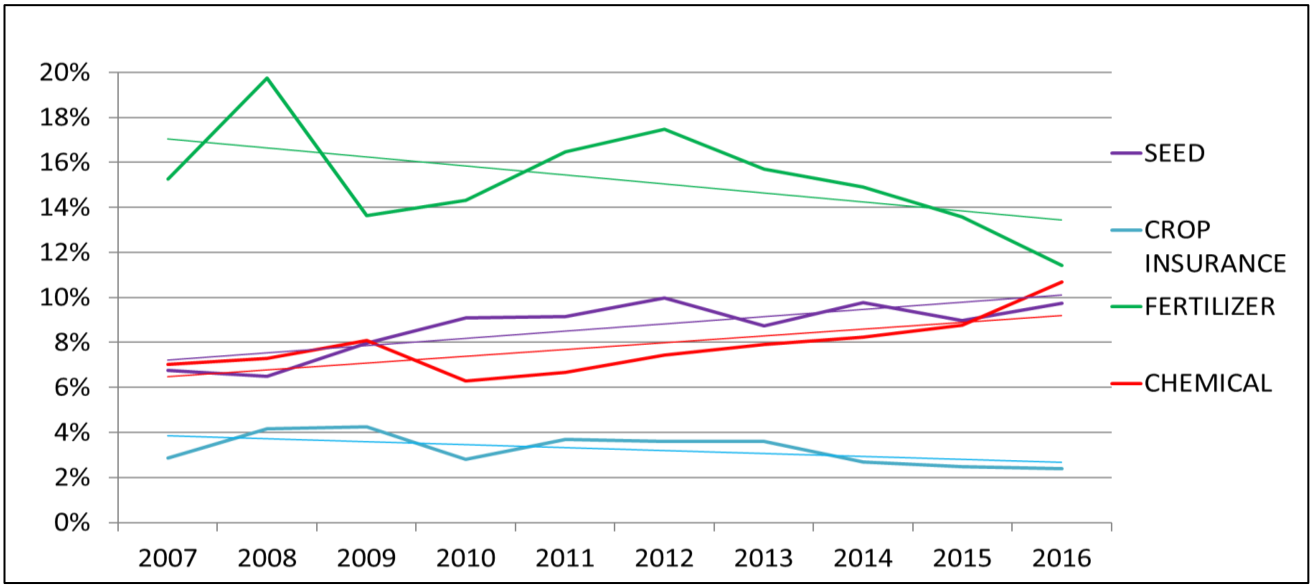


Figure 1. Percentage of total cost of production per acre, 2007-2016

After figuring out the cost/acre we looked at what is actually used in the makeup of a crop share lease. We looked at what the landowner contributed; land, share of fertilizer, share of chemicals, and share of crop insurance; and what the tenant contributed; seed, share of fertilizer, share of chemicals, share of crop insurance, equipment, labor, and miscellaneous expenses. The biggest factor that we did not know was what value to place on the land that the landowner is contributing in the crop share lease. After some discussion, we looked at our enterprise report and realized that if we combined our land charge for owned land, cash rent paid, and the percent of the crop that the landlord received ((100% less the operator %) x Gross Crop Income) we would have a good grasp on what value had been placed on the land. We wanted to be able to come up with a way of projecting the land cost in the future, so we decided to look at it as a percentage of gross crop value. After looking at each crop over several years, each one was coming out to right about 25%. This number looked great to us, as 25% was a number we were first thinking of as it is thought of as a rule of thumb when considering how much revenue to share with a landowner in a net-share lease.

Now that we had a way to value the land, we took our data and entered it into the KSU Lease spreadsheet found at www.AgManager.info . Some additional costs needed to fill out the spreadsheet where machinery costs and operator labor. For machinery costs we combined the hired labor, repairs, fuel, depreciation, and machine hire costs for our enterprises into one machinery cost per acre. For operator labor, we based it on our unpaid operator labor for our enterprises. After plugging these numbers in the spreadsheet for each of the last 10 years and then plotting the farmer's equitable share on a graph we produced Figures 2 & 3. The take-away that we got from the graphs was that even though the numbers seem to be all over the place, it seems that on average an equitable share rent for the last 10 years would be 65.4% for the farmer. Considering most of our farms are sharing with landlord on a 1/3-2/3 split, or 66.7% for the farmer, I would say our share rents have been pretty equitable for the last 10 years. The one crop that did stick out to us was double crop soybeans. Double crop soybeans somewhat followed the rest of the crops, but it had a bigger swing in how much the farmer should get of the crop. This is caused by the fact that landlords don't have much, if anything, invested in a double crop. Most landlords aren't paying any seed cost, typically there isn't much if any fertilizer, and crop insurance isn't available for double crops in our area, so the only out of pocket cost they have is any chemical cost. Essentially our data showed that in years that you have a good double crop, like in 2016, sharing the double crop the same as other crops is equitable. However, in low yielding years, it is very un-equitable to share the same. Our thoughts were to work with your landlord, as it is beneficial to both of you to double crop, it is the easiest way for you to pick up acres and spread out costs, and it's a good way for them to increase their rental income. Some suggestions we have are either have them pay some additional costs, such as paying their share of the seed, adjusting the percentage they get, or saying the farmer gets the first "X" number of bushels to recoup costs and then the rest of the bushels are shared.

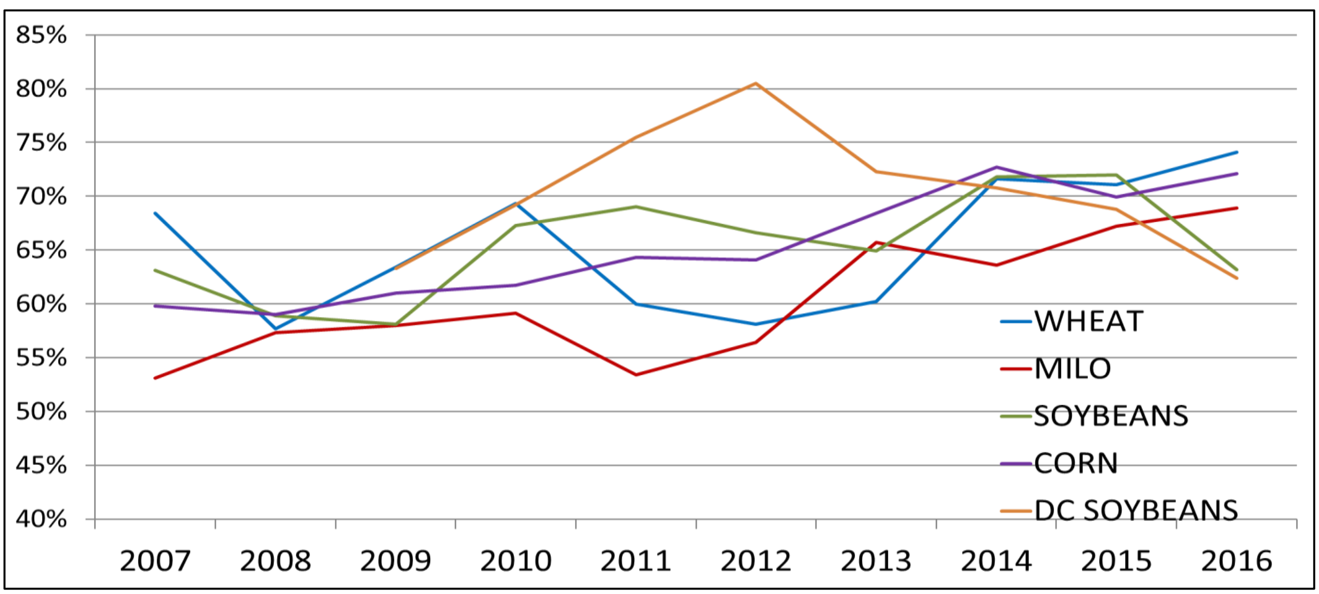


Figure 2. Farmer's Equitable Share of the Crop 2007-2016 by Enterprise

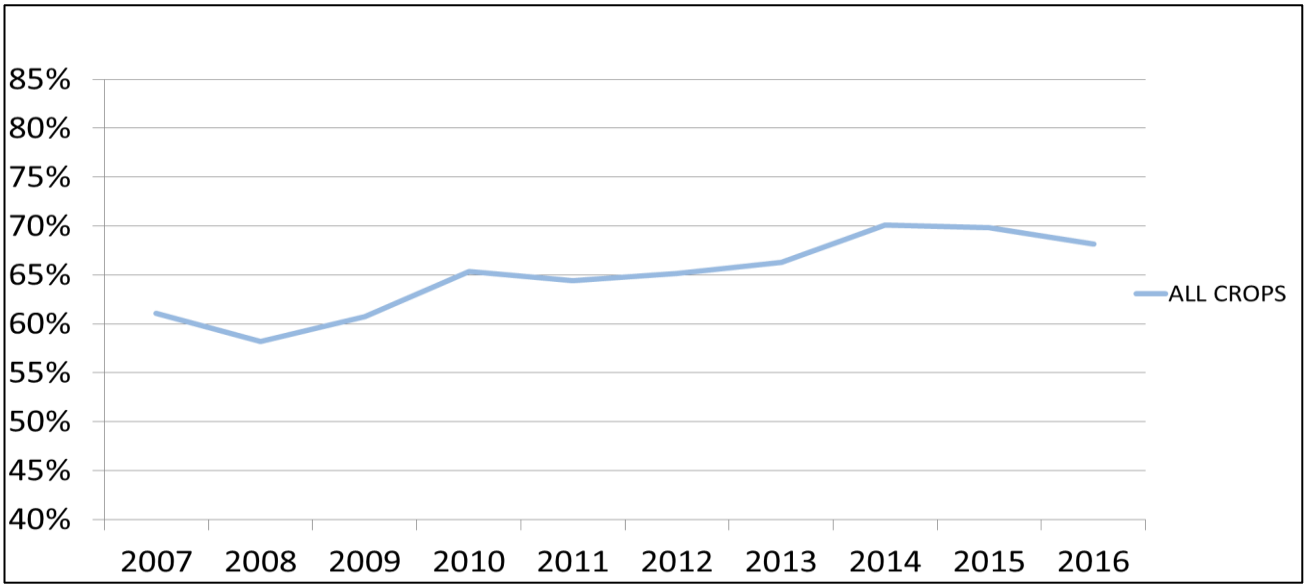


Figure 3. Farmer's Equitable Share of the Crop 2007-2016

After going through equitable share rents we knew we would have two questions left. Was it profitable and how does it compare to cash rent? Figure 4 shows that when combining all five crops over the past 10 years, an equitable share lease was profitable. The return to management and investment wasn't very high, only $1.39/acre, but it was profitable, being supported strongly by soybeans and double crop soybeans.

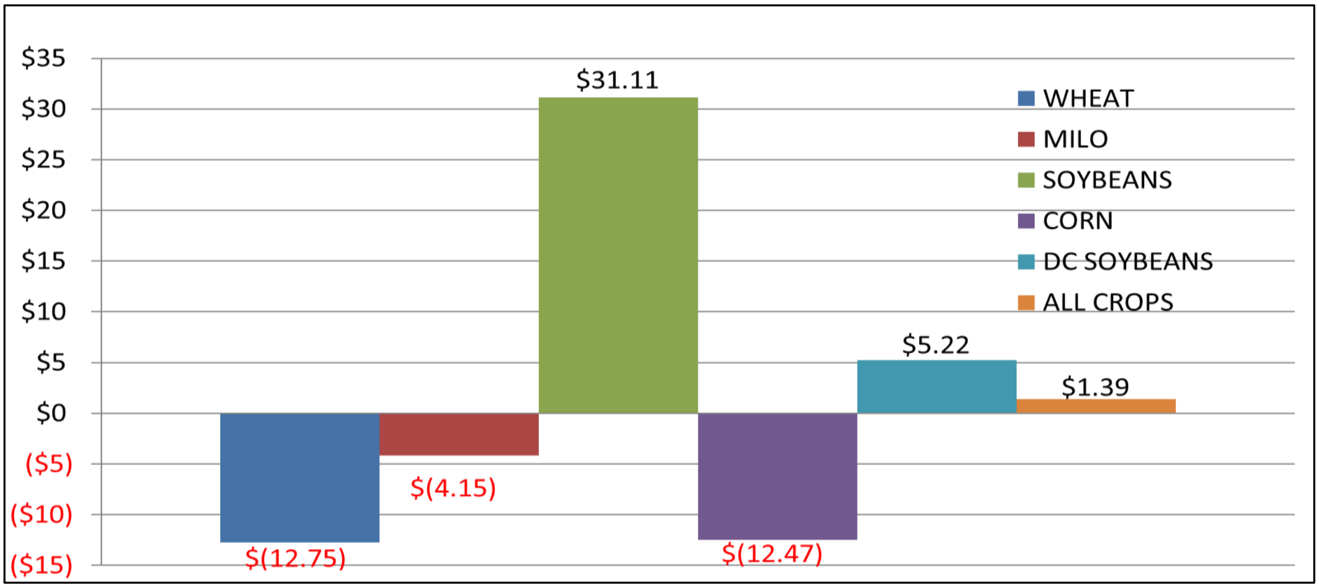


Figure 4. Average Return to Management and Investment 2007-2016

To answer the second question on cash rent, we looked at the landlord's returns under the equitable share rent. We plotted the numbers out in Figure 5, comparing return per tillable acre with double cropping ($109.39), return per tillable acre without double crop ($96.67), and return per harvested acre ($91.25). Essentially this shows that double cropping pays for both parties and it increases the landlord's return per owned acre and decreases the farmer's rent per farmed acre. We want to stress that this is not how much we suggest paying in cash rent, as it is the landlord's return for not only owning the acres, but also taking the risk in the crop as well. An example of this is that if you decreased the

2016 yields by 25%, which would still be decent yields considering our exceptional 2016 crops, return to the landlord per tillable acre would drop from $106.75 per acre to $80 per acre.

We highly recommend anyone looking at their crop leases and considering changes, to run their crop budget numbers through the spreadsheet found at http://agmanager.info/land-leasing/land-rental-rates/ksu-lease.

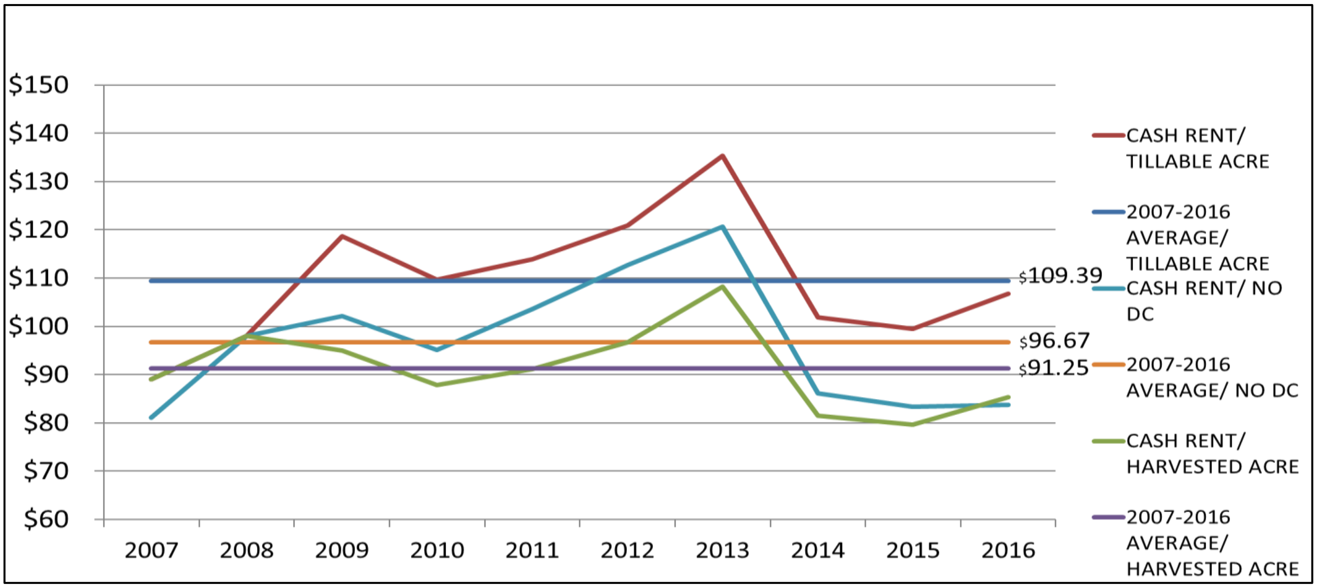


Figure 5. Average Cash Rent per Tillable Crop Acre 2007-2016

Kansas Economists Receive Awards at 2017 National Association of Farm Business Analysis Specialists Conference

Sandy Myers (Southwest KFMA Economist) won the "*Individual Newsletter*" which is a newsletter produced by an individual NAFBAS member for their clients.

Northwest Kansas Farm Management Association won the "*Local Association 2016 Analysis Summary*".

Mark Wood (Northwest KFMA Economist) & Bryan Manny (South-Central KFMA Economist) won "*Professional Paper*" and "*NAFBAS Professional Presentation*" for their "Planning for Income Tax Aspects and Consequences of Farm Financial Distress Transactions" work.

Pictured our Bryan Manny, Mark Wood & Kevin Herbel at the 2017 NAFBAS Conference

Producer Spotlight

Bill Came

Bill Came is a fourth-generation farmer from just outside of Salina, Ks. Bill managed Came Farms with his father, Bill Sr., his mother Joyce brother Chad and sister Darcy until his father's death in 2009. The Came farm was first established in 1895 when George Waycott Came and his wife Augusta settled on the land that became known as their "Homeplace".

Now Bill is bringing his over 11,000 acres into the modern age with a mix of technology, and good old fashioned know how and experience. For example, Bill managed the conversion to a no-till approach to crop production in 1996. He uses a state of the art global positioning system integrated with software in the home office to gain maximum efficiencies with input and outputs. However, Bill says the biggest impact on his operation is still the weather.

In addition to Bill, Chad, Darcy and Joyce, Came Farms has four full time employees along with help from several of the fifth generation of Cames as part-time help when not in school. Bill and his wife Laurie have three children, Dakota, Spencer and Meryn. Bill has coached several of his children's little league teams and enjoys attending his kids' school activities when not busy farming. Bill carries on the long-standing tradition of farming crops and running a cow-calf operation, and is now mentoring the next generation as they gear up to take over the farm that has been generations in the making.

September 2017 KFMA Research Highlights

The following research articles can be found on the KFMA webpage (http://www.agmanager.info/kfma/research-articles). Each newsletter will feature new publications that are available.

Replacing Farm Equipment

Gregg Ibendahl- K-State Agricultural Economics

The current farm financial climate that started in the mid 2010's has many of the same characteristics of the 1980's farm crisis. Despite the difficulty of the 1980's farm crisis, many farms managed to survive. These farms made machinery adjustments that greatly helped their cash flow. There are several strategies farmers can use to replace equipment and they all have different effects of cash flow. This paper discusses five replacement strategies that farmers can follow with their farm equipment.

How Long Does it Typically Take before Farmers Adopt New Technologies?

Terry Griffin - K-State Agricultural Economics

Since 2015, economists have collecting information regarding KFMA members' adoption of precision agricultural technologies. This paper compares the length of time from when different precision agricultural technology became locally available and to when farm operations adopted it. Results show statistical differences in adoption durations depending on the type of technology.

Upcoming Agricultural Economics Events

October 10 & 11, 2017: Ag Lenders Conference, Garden City and Manhattan.
http://www.agmanager.info/events/ag-lenders-conferences

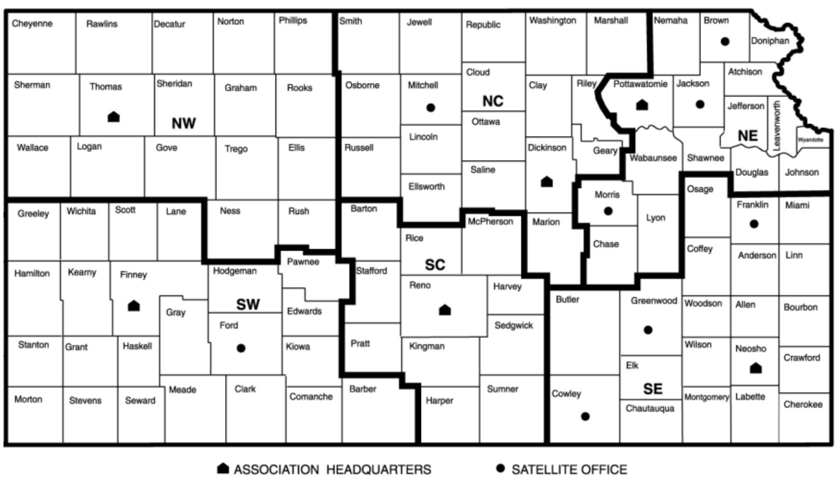
November 2, 2017: Kansas Crop Insurance Workshop, Bicentennial Center, Salina.
http://www.agmanager.info/events/kansas-crop-insurance-workshop

October 19-20, 2017: "Leading through Change" Professional Development Event, K-State Olathe Campus.
http://mab.k-state.edu/events/kc2017.html

October 31-December 14, 2017: Kansas Income Tax Institutes, 8 Locations across Kansas.
http://www.agmanager.info/events/kansas-income-tax-institute

December 14 & 19, 2017 and January 10 & 11, 2018: Farming for the Future, 4 Locations across Kansas.
A program focusing on outlooks for the farm economy and farm financial planning in uncertain times
http://www.agmanager.info/events/farming-future

For more information about these and other events, visit http://www.agmanager.info/events/ or contact Rich Llewelyn at rvl@ksu.edu or 785.532.1504. Other events hosted by the Department of Agricultural Economics can be found at http://www.ageconomics.k-state.edu/events/index.html.



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Vision: The Kansas Farm Management Association (KFMA), through its affiliation with K-State Research and Extension, will be the valued and trusted provider of integrated data management systems to apply critical thinking and strategic business planning for farm and ranch decision makers; and will be the premier source of farm-level economic data in the world.

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