

Traits of a High Functioning Family Farm

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. One of the hardest things in the world for farm families to do is work together and successfully pass a farm from one generation to the next. It doesn't just happen. It takes a lot of work and planning. Some county agent friends of mine did a really great presentation recently. What they found was that there were four common traits of a high functioning farm. First of all it started with gathering. The family members have to gather together, often in more than one meeting and start to lay out everyone's expectations. The next stage is chaos and it is closely related to the gathering because now everyone must come together to develop a shared and agreed upon vision of the farm's purpose and future. If the family members can't agree on a unified purpose, it's going to be a tough go from there. If you survive the chaos phase then comes the unity phase. This is when everyone starts pulling in the same direction with the goal in sight and clearly defined. Finally it's time to make it happen and sustained in the performing stage. The most important part in all these processes is clear and continuous communication. Family members have to know what their job is and then everyone needs to leave each other alone to do their job and trust them to do their job. Regularly talking is crucial to make this happen. And the best way to keep everyone talking is with food. Food is a unifier and a commonality. It may be doughnuts or a meal, but to open one's ears often requires food in the mouth! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Cover Crops for Weed Control

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I was able to attend a great program last week on cover crops. It was a fast hitting series of speakers that really addressed a lot of topics that I'm going to spend the next couple of days sharing with you! One of the things that researchers have been looking at is whether cover crops can control weeds. The theory being that establishing a good stand of cover crops will prevent weeds from growing or at least thriving and then we can terminate the cover crops by the time we plant the following crop. What they found out was that cover crops do in fact keep down weeds. Things like pigweeds and marestail, not to mention the annual grasses, were kept to a very low level by cover crops. In fact, winter rye, grown as a cover crop proved to be very effective at suppressing marestail because it does contain an allelochemical known as DIBOA. It's short lived in the soil, active for 2 or 3 weeks, after the winter rye is killed, but it's real and it works. Okay, this doesn't come for free. With the seed mix cost and cost of planting, cover crops are going to be close to the expense of one herbicide application. BUT the cost aside, there's a whole lot of other benefits to cover crops that a herbicide application isn't going to have. If you are using winter rye as a cover crop you certainly want to get it killed prior to heading to prevent it from becoming a weed. It's also essential that for cover crops to be effective at weed control they have to be planted, up and growing before the weeds get started. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

What do Cover Crops Do for Water Quality

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. One of the reasons that we use cover crops is to improve water quality and control erosion. Unfortunately, we don't know as much about this as we think we do and there is a lot of work being done in a lot of states around the country on cover crops, and no-till, and what it does for soil erosion and water quality that leaves the field. Erosion is fairly easy to monitor. We set up flumes and after rainfall events we collect water and see how much soil is in it. No-till makes a difference and cover crops even more difference. In general we have the same amount of water runoff of fields with cover crops as compared to those that don't, but the peak water runoff is lower with cover crops but the duration of runoff is longer. But the amount is about the same. Nitrogen doesn't stick around on the soil surface for long and we often don't see much in the runoff water, but phosphorus is another story. K-State studies are finding some very interesting results with phosphorus in runoff water from cover crop fields. The amount of phosphorus leaving the fields is virtually the same, but what we are finding is that the amount of dissolved phosphorus is greater in cover crop fields. We always assumed that the phosphorus was attached to the soil and if we keep the soil in the field we keep the phosphorus there. Turns out that isn't the case and that's causing some head scratching. Interestingly, it's what we've also found out about phosphorus in lakes with algae problems. Hmmm. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Water Use by Cover Crops

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. When cover crops started to gain popularity in Kansas I was somewhere between cautious and skeptical. Much of the research and reports were coming from east of us, and I mean the other side of the Mississippi River. Growing plants use moisture. Moisture can often be our limiting factor when it comes to plant growth or specifically crop yield. Growing cover crops between wheat harvest and crop seeding the following spring or even after fall harvest and spring planting seemed to me to be stealing from Peter to pay Paul. Cover crops have been evaluated from east to west across the state. In general, cover crops didn't seem to hurt yields and sometimes even caused a yield bump. Winter cover crops in western Kansas did seem to cause a little bit of a yield hit. Summer annual cover crops did not, possibly because of dormant season precipitation. In talking with the researchers there seems to be a break point at about 25 inches of annual precipitation where cover crops essentially cease to be beneficial. Our average annual precip is 33 inches so in most years, we could likely see some benefit by using cover crops. There has also been some concern expressed over nutrient stratification in the soil profile by cover crops. In comparison to no-till settings there doesn't seem to be any difference in creating stratification issues. In fact, if preplant fertilizer is done with injection technology below the soil surface, these concerns just seem to go away. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Why Do You Do What You Do?

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I was at a program filled with quite a few speakers recently. One of the speakers said something that just really resonated with me. The question was very simple and was directed at general ag production. It was, why do you do what you do? Why do you plant the crop rotation or crop mix that you do? Why do you manage your pastures the way you do? Why do you do what you do, or perhaps a better question would be, do you know why you do what you do? Agriculture is soaked full of tradition. We tend to do things a certain way because that's how our ancestors did it. If you've ever thought or said, "we've just always done it that way" then you need to stop and ask yourself, "Why?" Do we know why? If something is working and working well, then maybe we're well off not to question it or change it. But if you don't like the results you are getting, but keep doing things the same way, well, that's a questionable management tactic. Are we farming a certain way because our parents are expecting us to do it that way? Are we ranching because it's what our neighbors expect us to do? Those are all legitimate questions and very real reasons that I'm not putting down. But maybe we need to start being like the annoying 7 year old who responds to everything we say with, "Why?" We need to start asking ourselves why so often that we annoy ourselves to the point that it shocks us out of complacency. Then maybe we start following up why, with "what else could we do?" We can start trying to figure out if there is something else we should be doing. If we never try, we'll never know! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.