Why do herbicide treatments fail?

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. It doesn't matter whether it's controlling weeds in the lawn, weeds and brush in a pasture or weeds in a crop field, we regularly are dealing with control issues from lack of control or less control than desired. In reality, while we want to blame the herbicide for being a bad batch, it most often comes down to application error or applicator error. To be effective with a herbicide application is very easy. Use the right amount of the right herbicide at the right growth stage of the weed and crop during the right weather conditions. That's a lot of things you have to get right. Weather is a big one. Plants that are stressed due to heat or drought or even saturated soils, are going to be less likely to be controlled, and crops more likely to be damaged. For most weeds and most herbicides, temperatures between 75 and 85 are ideal with sunny skies, moderate humidity and low wind speeds. Good luck getting all of those by the way. Temperatures in the 90s and even low 100s are not good spraying days! Weeds also get away from us. A weed under 3 inches in height is going to be easiest to control. 3 to 6 inches is usually still controllable but once they get over 6 inches, it gets tough. Then we sometimes fail to read labels and use a product that may be weak or non-effective or use it at a lower rate than recommended to try to get by cheaply. The K-State Herbicide Weed Control bulletin is great place to check effectiveness of products. So if you want to get good control, know your target and use the right dose of the right herbicide at the right time and you'll have better results! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Now's a good time to soil test

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. The difference between a good manager and a great manager is often paying attention to the little things. Being able to garner a few extra dollars of profit per head or an extra bushel or two of yield per acre is often all it sometimes takes to switch between just breaking even to making a profit. So paying attention to the little things can often have a big benefit. Soil testing is one of those little things. I do not believe that you have to soil test every single year. I do think it's a good idea to soil test at least every 2 or 3 years. Soil pH and phosphorus levels move slowly so this is often enough to keep track of changes. I do feel that it is imperative to soil test every time you are getting ready to plant a new field of alfalfa. I've seen too many issues with new alfalfa fields in recent years from low soil pH or low phosphorus levels. A simple basic test can detect these potential problems and allow corrective action to be taken prior to planting. If you are planting new alfalfa this fall, get that soil test taken NOW. In wheat fields, I'm far less concerned about soil pH, but phosphorus levels are a potential issue, OR a place to save a few bucks if you have high enough phosphorus levels that negate the need for starter fertilizer. When you stop and think about what 50 or 100 pounds of starter fertilizer costs - that could easily be somewhere between 10 and 20 bucks an acre saved if you have high phosphorus levels. So take the time to get some samples pulled and get those fields tested .This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Developing that fertilization plan

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Yesterday we talked about soil testing. So once we have those soil test results back, what do we do with them. All too often, myself or an agronomist with the elevator will make recommendations for this year's crop based on what you are growing and what your yield goals are. But do you keep track of each field to see what direction phosphorus or potassium levels are headed or if pH is moving up or down? Those can all be indicators of long term changes that need to be addressed. Because of cheap fertilizer prices and everyone applying 50 to 100 pounds of starter with their wheat for year after year after year, it wasn't uncommon to find fields with soil phosphorus levels through the roof. We could skip a year or two of starter fertilizer and not hurt a thing. But now we are growing a lot more corn and soybeans and these crops and especially larger yields of all crops, take more nutrients out of the soil. Suddenly we are seeing phosphorus deficient soils. Potassium levels, that I said would never get low enough to require potassium fertilizer, are dropping to levels that I never thought we'd see and we may well need some potassium fertilizer on some fields within the next decade. But if you don't test regularly, meaning at least every three years, and then keep records to see what's happening, including records of what's been applied, what crops have been grown and what the yields were, how will you ever know which way you're headed. Soil testing is the first step, but it's only one step. From there we desperately need record keeping to track progress and direction. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Cost of production

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. We are an area that is basically half crop production and half livestock production. For many producers, hay is as important a crop as corn, beans or wheat. It may not be a direct cash crop, but it is crucial for the many livestock operations we have in the Flint Hills. So most cattle producers have equipment to harvest and bale hay. Now the big question. What's that hay worth? Do you really track the depreciation on that equipment, which isn't cheap anymore - no machinery is. Then you've got real estate taxes and unpaid operator labor and all of that is before we even get into the repairs, and fertilizer (for brome and alfalfa) or insecticide (for alfalfa weevil) and all the other expenses for baling supplies and repairs when your swather eats a rock and of course fuel for the swather and the baler. What are your expenses. Are you baling the hay because it's cheaper than buying it? Are you haying because you can harvest more than you need so it really is a cash crop. Or are you having because it's just what you've always done? If you are selling hay, are you covering all your costs or just the variable costs. Looking at farm management figures for last year in North Central Kansas brome hay averaged 1.73 tons per acre. Variable expenses were \$56 per ton and fixed expenses were \$49 per ton for a total cost of \$105 per ton. Alfalfa averaged 3.7 tons per acre, variable costs were \$62 per ton, fixed \$55 per ton for a total of \$116 per ton. So my question is, could you have bought hay for less than that? If you start pushing a pencil and looking at how much hay you need, you may sell your baler. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Start thinking about seed treatments for wheat

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. If you are going to plant wheat this fall, and I know at least some of you will as it fits in so well with your rotation, you'll need to be ordering seed before long. No, this isn't a program on wheat varieties. I haven't even see the preliminary yield trials yet. But one of the decisions that you are going to have to make is whether you want that seed treated and then whether it'll be a fungicidal seed treatment only or an insecticidal and a fungicidal seed treatment. Unlike corn and sometimes soybeans, where they are going into cold soil and we need seedling disease protection, wheat is going into warm soils. Assuming there's moisture it's going to sprout and emerge in short order and not be very susceptible to seedling rot diseases. But there are several seed borne diseases, smut and bunt, that we need to protect against and that is best done with a seed treatment. To me, this is a no brainer decision - you just do it! But the insecticidal question is bigger and tougher. Insecticidal seed treatments, on average, across the board with all crop species, will generally provide 30 days of protection maybe a little more under some conditions. It will reduce early season aphid populations and may even help protect again early Hessian fly. But many of these have rarely resulted in consistent yield increasing results. Some years it does, some years it doesn't. It is staying warmer later into fall now than in the past. Insect problems seem to be running longer in the season. Do we use them or not. I can't show you any evidence to prove it. It's a gut feeling though that it's cheap insurance, just in case. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.