Late Season Forages

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I want to follow up a topic I hit a couple of weeks ago but is still fresh on everyone's mind and that's late season harvesting of hay. Had we not had the drought which led to a short or no hay crop which was then followed by high nitrates in much of what we were trying to harvest, no one would even be talking to me about this. But the number of people that have been asking me is quite surprising. I had someone bring in some of this lush bromegrass fall growth to send off for nitrate testing about ten days ago. I went ahead and had them run protein on it too just out of curiosity. First off, the nitrates were less than 100 ppm. What we'd expect to see. The protein on this lush bromegrass sample was almost 20%. We're talking pretty good quality alfalfa there. Granted, the yield may not be all that great and grazing may be preferable, but that's one of the reasons why producers are looking at that fall growth for utilization. Hold off until late October to do any cutting on prairie hay and probably mid November on bromegrass. Even that prairie hay regrowth is going to have some pretty good protein. Now on to wheat pasture. Rain is going to make those fields muddy and that may concern you. That concern, while real, is somewhat overstated. It does become critical that the wheat be well rooted as sloppy conditions will make it easier to pull plants up by the roots. Hopefully though it will have dried out enough by the time you can turn cattle out though, that this isn't a problem. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Are We Headed for a Wheat Stem Rust Disaster?

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Prior to even MY being alive, or at least very aware, stem rust was a major concern for wheat production. When it was discovered that stem rusts at the time used an alternate host of barberry, there were state wide campaigns to eliminate any and all barberry. That took care of the problem for a while. Then plant breeders started to find strains resistant to stem rust and that really put the disease on the back burner. At least for a while. The problem is that there are some very high yielding wheat genes, and therefore wheat varieties, that don't have stem rust resistance. This seems to roll around every so often. In 1986 we had a stem rust outbreak. I remember that well. K-State had a new variety just getting ready to be released that was really a screamer when it came to yield. It didn't have stem rust resistance. At all. The new variety was being increased for release in the fall of 1986. When the stem rust exploded all over it that year, it was scrapped. If that epidemic had hit in 1987, someone would have had egg on their face! This past year, depending on where you are in the wheat belt, the proportion of acres that were planted to stem rust susceptible varieties was anywhere from 10 to 35%. There are currently 7 very popular varieties that are not resistant to stem rust. There's more than that, but these are really popular varieties. All of this is just to say that we really need to be watching what we plant. Stem rust is getting ready to rear it's reddish head again and this is something that is so preventable! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Soybean Green Stem Syndrome

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Soybean harvest, serious soybean harvest, is getting ready to go just as soon as it dries up enough. How many times have you pulled into a field where the leaves are gone, the beans are dry and the stem is green as a gourd. This is a physiological condition known as soybean green stem syndrome - really creative name isn't it? I don't know whether we'll have this problem this year or not, but I know a lot of folks have dealt with it in the past. Soybean green stem syndrome seems to be worst when we have early season stress, low pod counts and improved late season growing conditions. With the late season improved growing conditions the leaves produce carbohydrates and protein. These move out of the leaves, into the stem to be deposited in the beans. If you have low pod counts, the foliage is basically cranking out more products than the plant has beans to send it to. We've got two of the three necessary conditions this year. The one thing that is different is that this year, most of the fields I have been in, the plants are loaded with pods. Hopefully this demand will take all those carbs and protein out of the stem, as it should, and put it into big plump beans. If it doesn't you can either wait until a good hard freeze and the stem finally dries down. OR you make sure that the cutter bar is good and sharp and you just take it slow going through the fields. The other wild card is late season rain can make it worse. If the beans are standing good and not shattering, waiting may be best. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Soil Testing and What You Need to Do

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Soil testing is a very critical and under utilized crop production management technique. Yes, it involves time and a little bit of labor but it's the only way to know for certain that you A) aren't shorting your crop on necessary nutrients and B) you aren't wasting money fertilizing with nutrients that you don't need. Tomorrow I'll talk about some of the details of obtaining a soil sample, today, just what you need to consider. The most common nutrients tested for are nitrogen, phosphorus and potassium as well as soil pH. Soil pH, phosphorus and potassium are generally just done on a sample from the top 6 inches, some times, especially in no till just the top 3 or 4 inches. Nitrogen really needs to be done on a 24 inch profile sample or at least 18 inches to get a full picture of what's out there. But if you're pulling that profile for nitrogen you might as well test for the other mobile nutrients, chloride and sulfur. If you want to test for zinc, never, ever use a galvanized bucket - use plastic. If the soil is wet, don't put it in a sealable plastic bag. Warm soil and moisture with an absence of oxygen can cause some microbial activity to really crank up which can alter your nitrate test. If the soil is really wet, lay it out to dry and then bring it in. Ultimately we are going to send in a pint of soil. If you bring in more than that, I'll mix it up and pull out a one pint sample. The K-State soils lab can test for quite a few micronutrients also. Stop by and ask to see a list of what they can test for!

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Get a representative sample

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I talked about some reasons of why and when to soil sample yesterday. But what we all know is that a soil test is only good if the sample is representative of the field. We all know that no two spots in a field are identical. We see that from grid sampling. If you pull just one soil sample, it may say anything. So we encourage pulling samples from multiple places in a random pattern across the field. You want to average out the highs and lows. But how many is enough? Studies have been done looking at that very question. If just one sample was taken and used, the variation of that one spot could be as much as 85% plus or minus what the field wide average really was. The biggest increase in accuracy occurred in the first few samples. It went from 85% with one to 63% with two, 50% with three 43% with four, 41% with five. This study went out to 50 cores to make the one sample. At that level the expected variation from the actual reading was down to around 10%. If you really want to have good accuracy, I'd be looking at 15 to 20 subsamples. If I'm doing profile tests, I'm not going to do 15 to 20. I'll do five or six, but I'm not pulling 15 24 inch samples. Just sayin! Be aware that the more subsamples you take, and the more often you take them (yearly vs every other year versus every three years) the better understanding you'll have of the status of soil nutrients in your fields, what direction those nutrient levels are heading and how much fertilizer you really need! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.