

### Freeze Damage on Wheat

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Just to be upfront, these radio programs are written and recorded usually Thursday and Friday of the week just ended. As I write this on Thursday afternoon I know what the weather forecast is and then it's just a wait and see as to what the weather actually did over the weekend. The upper teens that we had earlier last week didn't seem to have done much damage. I was out in fields Thursday morning and the wheat was looking in pretty good shape. Earlier rain has allowed for good root development and the earliest tillers, at least in the fields where I was, were really just starting to joint. At this stage of growth, damage is going to show up in that 12 to 18 degree range. The heads are still so low down that the soil and the rest of the plant above it was able to provide adequate protection. Fields where tillers are further along are going to see some problems, at least in those early tillers. That was the situation we were in during the 2007 Easter Sunday freeze. County wheat yield that year was half of long term average. If any of that snow developed, that will provide additional insulation and protection. And ultimately how cold did it get in the field and how long was it that cold. How much wind was there? Wind will force the cold air deeper into the canopy of the field. By the end of this week we will start to get a feel for how much freeze damage there was. If you have questions, just call and I'll come out and look, but give it a few more days and hope it doesn't smell like silage! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Alfalfa Weevil

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I know we just talked about alfalfa weevil last week and we're going to talk about them again today, in light of last week's temperatures. The upper teens that we had earlier last week the alfalfa survived just fine. I was checking fields last Thursday and did find my first alfalfa weevil! So the follow up question is what did the temperatures Friday night do? And that we may not know for a few more days. If you remember back to 2007, the alfalfa was quite a bit further along as in 8 inches tall, when we hit the high teens the morning of April 7<sup>th</sup>. That sudden freeze essentially froze all the alfalfa back to the ground and it had to start over with new growth. In that year, we didn't have much alfalfa weevil issues because most of them had hatched and those that didn't freeze to death starved to death as it just took too long for new food sources to show up. This year is different. We have a lot of eggs that haven't hatched yet. Most weevil larvae can crawl down into the litter and duff at the base of the plant and survive fairly cold weather. If eggs haven't hatched they are likewise pretty immune to cold. Are we probably still going to have to spray for weevil this year? I think so. Exactly how much damage to the alfalfa there was we should know for certain in a few more days. With warmer weather on the horizon we will need to check stems that didn't get frozen for weevil damage. If we have to have a lot of regrowth from the crown, it may be interesting to see what happens! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

What can I do about my farm pond?

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Farm ponds are commonly used for livestock watering. When rainfall and runoff is good, this is great. But when the pond runs dry, it can be a real issue and even affect the rentability of a pasture. Now, unless a landowner advertises a pasture and guarantees water, the landowner has no responsibility that they have to provide water. Pastures are generally leased as is! In times like this year, where we've had dry soil conditions and many months of less than half of normal precipitation, we just aren't getting any runoff. Even in good years, open pan evaporation rates are roughly double our average precipitation. So unless you have a spring, a reliable spring, feeding a pond, it may very well be going dry right about now. So low or no runoff is one reason why a pond may go dry. A second reason may very well be lost storage capacity. All ponds silt in over time. Moving water moves soil, that's all there is to it. So over time, storage capacity is diminished by siltation. Since it can't hold as much water, it will go dry quicker. The last issue has to do with how well the bottom of the pond is sealed. Many ponds are built in less than ideal soil or right on top of limestone. These situations allow water to leak out of the bottom through porous limestone. While we can't do too much about rainfall, the other two can be addressed through cleaning out and rebuilding of the pond while it's dry. If you have a dry pond, this may be the year to address issues! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Starter Fertilizer and Corn

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. One question that I routinely get is whether starter fertilizer needs to be added on corn even when we have what would seem to be adequate soil phosphorus levels. The answer is a very definitive maybe. Corn is the first crop that we plant. We are often planting into very cold and some years wet, soils. Under these conditions, phosphorus and potassium are slow to be taken up by that struggling small and young corn root system. We rarely recommend potassium as our soils frequently have an abundance of potassium. Potassium levels over 130 ppm and phosphorus levels over 20 ppm usually indicate enough nutrients for good plant growth. Yet we can periodically see yield responses to starter fertilizer containing P and K in early planted corn fields. If you are planting early into cold and especially wet soils, and phosphorus levels are under 30 and potassium levels under 200, you should probably consider at least some starter fertilizer. If phosphorus levels are under 20 ppm, you HAVE to apply some phosphorus as starter fertilizer. Probably the best way to apply it is as a 2 x 2 placement off to the side and below the seed. You never want to apply more than about 8 pounds per acre of N and K combined in direct seed contact. The yield WILL be negatively impacted. If you aren't set up to do a 2 x 2 placement we find that a surface dribble band to be just as effective as a 2 x 2 placement at getting nutrients to the roots of those young plants with excellent results. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

How do you seal a pond

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. A couple of days I was talking about dry ponds and suggested taking advantage of this time to clean ponds out so they are deeper and maybe fix dam or emergency spillway issues. One of the things that frequently comes up is how to seal a pond that leaks out of the bottom, or if you've just cleaned out a pond how do you make sure it will hold water again. In the old days farmers would spread a heavy load of manure over the new pond bottom and disk it in. While it often worked, we now know that we really need try to keep those nutrients out of our water sources. We commonly hear about using bentonite to seal a pond bottom. Bentonite is a type of clay that swells a lot when it gets wet. But it also can develop huge cracks when it dries out so it often doesn't work in ponds that regularly see a lot of water level fluctuation. Bentonite can work very well in farm ponds and you need 1 to 1.5 pounds of bentonite per square foot of pond bottom for standard soils, 2 to 3 pounds if the soils are sandy. Bentonite is sometimes surface applied to existing ponds with the hope that it will settle to the bottom and seal it, but this is often not effective. You really need to spread it out, harrow or disk it in and then roll the pond bottom to compact it. There are a couple of other options. Soda ash at the rate of 10 to 25 pounds per 100 square feet works well as long as there is 15% clay and clay plus silt of 50%. You can also use rock salt at 20 to 33 pounds per 100 square feet of pond bottom. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.