# **Brush Control in Pastures**

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. The latest figures that I have seen indicated that 60,000 acres of Geary County native pasture was burned this year. That's a pretty good chunk of our large tract native range. For various reasons we often haven't recommended burning and foliar herbicide treatments the same year but that is changing. IF you do treat the same year you burn, wait a little bit later to allow the plants to get into that full leaf stage which is that point when root reserves are frequently the lowest so the greatest damage can be done. Regardless of whether your burned or not, timing is very crucial to effective brush control. Not all species reach full leaf stage at the same time. We generally encourage treatment in the first half of June as that seems to catch the best amount of overlap across the common species. In general, buckbrush and blackberry have the earliest treatment time (which is why they are also the most easily controlled with fire), followed by dogwood, plum and lastly sumac. Generally, whatever you use, make sure it has triclopyr in it as that seems to be what helps the best. Several other things can improve efficacy of your treatment. Do not use diesel fuel or kerosene unless you are doing basal bark or cut stump treatment. Diesel alone will knock the leaves off the brush and diminish herbicide effectiveness. Use the rate as recommended on the label and then apply with a hand gun to thoroughly soak the vegetation. Mist blowers are not labeled for many of the common herbicides, so don't use them! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Sericea Lespedeza Control

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Sericea lespedeza is a challenging perennial weed issue. Many mechanical and livestock oriented programs basically aim to reduce seed production so it doesn't get worse. In the past we have only had herbicide choices and then it's a multi-year effort to stay on top of seedlings and tough to control established plants. When there are good growing conditions in the vegetative growth stage, like we are seeing now, June is a great time to treat. Unlike fall when we focus on using products containing metsulfuron, late spring and early summer spraying focuses on herbicides containing triclopyr such as Remedy Ultra at 1 to 1.5 pints per acre or Pasture Guard HL at 3/4 to 1.5 pints per acre. Plan on using a minimum of 10 gallons per acre and 20 would be better. Thorough soaking with a handgun is you best option though. Again, many items aren't labeled for use in a mist blower so please stop using them! There is a new approach emerging for sericea control however and that involves late summer burns. Multi year studies done right here in Geary County have shown that burning in late August or early September reduces seed production to zero and possibly sets up a good opportunity for late season spraying following regrowth. This also allows enough time for grass to regrow and settle in for winter thereby reducing concerns about erosion. We are just on the tip of this iceberg but it is looking very interesting. Late summer burns require some different techniques, and they burn slower, but it will work. Go ahead and treat this spring though, and stay tuned for more developments! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

# Long Term Precipitation Trends

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. So here's the challenge in dealing with climate. Climate is the average conditions over a large area. A state can be in the middle of a drought, but you can have spots within that area that have managed to hit things right, from year to year, and grow a decent crop. Studies of rainfall over the past 120 years have yielded some interesting outcomes. In addition, study of tree rings from the region over the past thousand years yield even more insight. Tree rings can't tell us how much rain fell in any one year, but they can indicate whether it was abnormally wet or dry. The drought of the 30's were not the worst droughts over the past 1000 years. Over the past 1000 yers there have been many multiple year droughts ranging from 5 years to as long as 40 years. Looking at a little more recent history though, the past 20 years, annual amounts of precipitation have increased especially in central and eastern Kansas. In essence, we are having more occurrences of annual rainfall above the long term average when figured regionwide. Any one reporting station may have been well above or below, when looking at all the reporting districts within that western or central or eastern Kansas region. Now, trends are one thing, but when run through the statistical analyses we haven't seen significant differences, yet anyway! What does all of this mean? When you are planning for your cropping season, you shoot for the average. Recognize that we are seeing more extreme rainfall and less dependable, on a week to week basis. Someday we'll know what all of this means, but not just yet! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## No-till vs Till expenses

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Okay, quick ag econ quiz - which is more expensive on a per acre or per bushel basis - traditional tillage based crop production or no till production? Kansas Farm Management Association took a look at this topic when they were doing their analysis of the 2016 data. These figures were averaged across all crops. Right to the bottom line - No till farms had a slightly higher total expense than tillage farms. The difference was \$16.51 per acre which is only about a 5% differece. Tillage farms had a very slightly higher machinery expense (less than 2 bucks per acre), higher labor expense but lower total crop expense. No till farms had higher seed, fertilizer and herbicide expenses. BUT no-till farms had \$30 more in gross crop value per acre. Part of the difference comes down to harvested crops per crop acre. Before you give me a double take here, think one thing, double crop. Tillage farm average 1.062 harvested acres per crop acre and no-till farms had 1.103 harvested acres per crop acre. No-till farms are more likely to double crop soybeans after wheat harvest. Tillage farms averaged 69 acres of double crop and no-till farms average 164 acres of double crop. What I don't want you to think is that if you don't do no-till, you won't stay in business - that's not what this is saying. What it is saying is that no-till likely has a better chance to be profitable. One thing that we know about no-till is that it does create a more resilient cropping system. We can do a better job of using soil moisture. But ultimately, you need to do what you are comfortable with and works for you. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

#### Rough-leaved Dogwood Control

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. The three big woody brush issues that I see in pastures are buckbrush, smooth sumac and dogwood. Of these, dogwood may be the toughest to control. Buckbrush and sumac are both pretty susceptible to straight 2,4-D, but dogwood takes a little bit more than straight D. The three are actually quite intriguing to me. Buckbrush leafs out early so we can have good success controlling it with late April burns. It is also easily controlled with 2,4-D and other herbicides. Sumac absolutely is not controlled by fire and has to be treated with herbicides, but again, 2,4-D alone works pretty good. Dogwood can be controlled by fire, but because it leafs out so late, most people are already through burning. The other challenge with dogwood is that it is easily defoliated with most herbicides, but actual mortality is usually less than 25%, so several consecutive years of treatments are really required. There are a few products that can work better, achieving greater than 50% mortality on dogwood. These are PastureGard, Surmount and Grazon plus triclopyr. Best control is going to come from using these products as a 1% concentration and applying with high volume handgun spot treatments. Use a non-ionic surfactant to improve control. Mix in water only - NO diesel - in fact never use diesel in foliar treatments and apply as a through soaking spray. Timing is also critical and right now is a good time - sneak it in before corn planting and soybean planting. You also need to realize that one year of herbicides isn't going to do it - plan at least 2 to 3 consecutive years to get it under control. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.