

Prescribed Pasture Burns Can Be Anytime

AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

Prescribed burn is a phrase that we use to describe a situation where fire is used in a natural ecosystem as a management tool. We associate prescribed burning with pastures but they are also used in timber management and even wetland ecosystems management. Most years in March and April we see the columns of smoke out in the prairie as last year's grass remnants, along with the current crop of cedar trees are removed from the prairie.

Prescribed burns don't have to be in the spring only though. The whole purpose of a prescribed burn is to use fire for a specific purpose. We know what the spring burns are for. If all a pasture manager wants to do is control cedar trees, that pasture can be burned literally any time of the year. But we've started to find that there are some very good reasons to burn parts of some pastures in the late summer, rather than the spring.

The reason for a late summer burn is a pesky plant, actually a noxious weed, called sericea lespedeza, which I will just call sericea. Sericea is a legume from central and eastern Asia. Like far too many troublesome weeds, it was brought here by humans as a forage crop and soil erosion control crop. It has adapted over time and is well suited to growing in areas of the US that don't get too cold in the winter and receive at least 30 to 35 inches of rain per year. The problem is that it spreads rapidly by seed.

While improved sericea varieties are used and recommended in southern states for livestock forage, the wild type sericea that we have in Kansas is high in tannins making it quite unpalatable to cattle. Wild sericea is also a prolific seed producer. In an average year, a stand of sericea will produce 850 pounds of seed per acre. Like many legumes (including alfalfa and clovers), this small seed is hard and can lie dormant for several years before germinating and growing.

Land managers have looked at using goats or sheep to control sericea. While both species will keep it grazed down, the sericea quickly grows back when the animals are removed from the pasture. The more common method of control has been herbicides applied to areas of sericea in the early summer, late summer, or both. While regular and consistent herbicide use has reduced stands of sericea, it never seems to totally go away. Part of the problem is the ongoing germination of dormant seed. Spring burns tend to scarify the hard seed coat causing it to break dormancy and start growing. Then you are back to square one. So the challenge comes down to controlling the existing plants, controlling new seedlings, and stopping seed production.

In several years of research, a late summer burn, around September 1st, has reduced seed production to or nearly to, zero and has removed all the existing growth of the sericea. Immediately following the burn the sericea starts to regrow, new seedlings often start growing, and a month or so later pasture managers can go in and apply a herbicide to control the regrowth and the new seedlings. The grass also regrows and establishes good cover before fall helping to control potential soil erosion. What is probably most amazing, is that even with grass as green as it is from recent rains, it will burn. It burns slowly and with a lot of steam (more steam than smoke), but it will burn!

So if you start to see smoke in the hills in late August or early September, rest assured that nobody has gone bonkers. They're just looking at new management techniques involving prescribed burns!