

Bluestem Breezes
Karaline Mayer
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Prescribed Burning of Native Grasses

Spring is here and your allergies may already be making you aware of this news! Why? A number of hay fields and pastures have burnt, are burning, or will burn.

These agricultural burns we'll discuss are referred to as prescribed burns, meaning they are intentional, controlled burns. This week, this column is geared toward both the folks that conduct prescribed burns and the folks that would like to learn about prescribed burning.

Last year, approximately 23,000 acres in Wabaunsee County burned. Of those acres, 15,000 acres burned in the month of April. This means stock up on your allergy defense mechanisms today!

There is a purpose for burning, and before undertaking a prescribed burn, evaluate your plan.

Timing is critical and dependent on your management philosophy. Let's focus on native, warm-season grasses.

Regardless of how warm the weather, the grasses do not actively grow until later in the spring. Mid- to late-spring burns (0.5-2 inches of new growth) increase livestock gains and brush control. This is typically mid- to late-April in our area. Depending on temperatures, these dates may shift by 10 days earlier or later. Do take note that burning too early will reduce forage yields.

The soil profile should have adequate water and the surface should be damp during burning. For this reason, many producers did not burn their typical acreages over the past two years. Currently, much of our grasslands are likely borderline in terms of moisture when it comes to prescribed burning.

On grazed native pastures, species composition will be effected with timing of prescribed burns. Late spring burns (as compared to unburned sites) will have increased cover of big bluestem, indiangrass, and switchgrass basal cover. Little bluestem, sideoats grama, and buffalograss basal cover is normally maintained by these same burns.

What changes occur over time to the tallgrass prairie if prescribed burning is eliminated? Woody plants will increase as prairie grasses and forbs decrease. In less than 40 years, the pasture will likely be 100% tree and shrub cover. For those of you not familiar with prescribed burns, typically pastures with large numbers of eastern redcedar trees are (1) not burned regularly, (2) over-grazed, or (3) both 1 and 2. While this column isn't covering that topic, appropriate livestock grazing levels go hand-in-hand with burning when we're focusing on grassland management.

To decrease woody plant and forb growth, the prescribed burn should occur when the growing point is above ground, there is an inability to resprout from belowground, and food reserves are at the lowest point.

There are regulations for prescribed burning here in the Flint Hills. For more details on conducting a prescribed burn, regulations, smoke models, and other relevant information, check out www.ksfire.org.

As a refresher, here are the Open Burning Restrictions ((K.A.R.) 28-19-645a) for the Flint Hills' counties, formally adopted by Kansas Department of Health and Environment (KDHE) on December 29, 2010:

“Burning that will continue to be allowed in these counties during April include agricultural burning related to the management of prairie or grasslands (range or pasture management) and conservation reserve program (CRP) burning activities. Restricted activities include burning of materials such as land clearing debris, crop residues, construction debris, fire fighter training burns, and yard waste. Existing exemptions in K.A.R. 28-19-647(a)(1) and (a)(2) have been retained in the proposed new regulation as K.A.R. 28-19-645a(b)(2) and allow for the following: (1) open burning on a residential premise containing five or less dwelling units and incidental to the normal habitation of the dwelling units; and (2) open burning for cooking or ceremonial purposes on public or private lands regularly used for recreational purposes. Other exemptions may be considered on a case-by-case basis for certain activities, of which the burning of storm debris would be a good example of a possible qualifying exemption.”

Here in Wabaunsee County, to conduct a prescribed burn, you must obtain a burn permit through the Emergency Management Office (Amy Terrapin, Director; 226 Missouri St, Alma; 785-765-2662). Applications may also be picked up in the Wabaunsee County Courthouse.

All burns must be reported to the Wabaunsee County Sheriff's Office prior to conducting the controlled burn (765-3323 or 765-2217). Dispatch will ask you for the following information: contact information, location of burn, burn permit number, length of time expected to burn.

For additional information on conducting a safe, prescribed burn, visit the Extension Office (215 Kansas, Courthouse, Alma; kamayer@ksu.edu; 765-3821). For Bluestem Breezes archives, check out wabaunsee.ksu.edu.