News column for use week of April 8, 2024 Kaitlyn Hildebrand, Livestock Production Agent River Valley Extension District April 5, 2024

Prescribed Burn as a Management Tool

Prescribed fire or prescribed burning season in Kansas begins in late February and continues through mid-April. Research and experience have shown that fire can be used as a major management practice for native and introduced grasslands, hay meadows, and establishing and managing new native grass stands. It can recycle nutrients in old plant growth, stimulate tillering, control many woody and herbaceous plants, improve grazing distribution, reduce wildfire hazards, improve wildlife habitat, and increase livestock production in stocker operations. To gain these benefits, fire must be used under specified conditions with proper timing.

Prescribed burning must be integrated into grazing management to gain the full benefits. Combining stocking rate with prescribed burning will allow the desirable vegetation to be competitive and help reduce the encroachment of many undesirable plants. Prescribed burning might be one of the best management practices for the overall health of grassland. However, some precautions need to be taken not only for the safety of those involved in the burning process but also for the surrounding areas to make sure prescribed burn areas don't get out of hand. Here are five steps to a safe prescribed burn.

Step one develop a plan to include how many people and how much equipment you will need, working with neighbors to burn at the same time, and contacting your local emergency agency to obtain the appropriate permits. Make sure everyone involved in the burn is wearing proper clothing, communication devices have been secured and understands the burn plan, which should include who to contact if the fire gets out of control. Before considering burning, determine if site and moisture conditions are appropriate.

Step two prepare the site by creating adequate firebreaks. Firebreaks can be mowed, disked lines, roads (not highly traveled blacktop roads), or other natural firebreaks. If trees or other brush is present near the firebreak, they must be cut, and the firebreak width significantly increased. All dead trees near the firebreak must be cut.

Steps three and four observe the weather before burning. Know the weather conditions on the day of the burn and 2 to 3 days following. Understand how weather conditions can affect your burn days. Good information about daily fire weather can be found on the National Weather Service site. Closely look at the hour's weather graph to determine wind speeds, direction, and humidity for the burn day and 2-3 following days. The sweet spot for prescribed burning is wind speeds between 8 to 13 mph and humidity greater than 30 percent. If a storm front with shifting winds is approaching, consider delaying the burn due to potential rekindling after the burn.

Step five check and Re-check the site two to three days after the burn. Before leaving the burn site for the day, extinguish any burning material within 100 feet of the burned edge. Remember to never burn at night as darkness prevents the drivers of vehicles or personnel on foot from being able to find their way, see obstacles and landmarks, judge distances, and assess the overall fire situation. Preparation and understanding are key when doing a prescribed burn to ensure the fire does not get out of hand and create an even bigger problem like a wildfire. If you have any questions, please contact Kaitlyn Hildebrand in the Concordia office at 785-243-8185 or khildebrand@ksu.edu.

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