



To Burn or Not to Burn

February 14, 2013

This is, of course, always the question that managers of bermudagrass pastures and hayfields have this time of year. Fire can be beneficial in several different ecosystems, including Southern pine forests and the native prairies of the American Midwest, and our bermudagrass stands are no different. Burning of bermudagrass pastures can provide some benefits, but is most beneficial in hayfields. Although there are several possible benefits of burning, proper planning and precautions are required to guarantee your efforts are successful and safe.

The most evident benefit of using a prescribed burn is to eliminate the buildup of thatch, which can have several negative impacts, including the inhibition of new stolon growth, delay of spring greenup, and reduced water infiltration. Burning also helps provide for a clean first hay cutting and may also help the soil warm up faster because of the blackened field surface absorbing more solar energy. Burning can also reduce insect and disease pressures in fields, especially leafspot disease and spittlebugs. Use of fire can also be an effective herbicide; reducing weed pressure by eliminating many annual plant seeds (i.e. henbit, chickweed, or crabgrass) and destroying woody perennials such as briars, although fire is not as effective against weedy perennial grasses such as Johnsongrass or knotroot foxtail. Burning also releases nutrients from the thatch layer into a readily available form that the bermudagrass can benefit from.

One important factor that determines the effectiveness of burning is the amount of mulch that is present on the field. Mulch is considered the most recent growth in the field, primarily from the previous growing season. Having a uniform layer of 4-6 inches of mulch will help carry a fire which will help achieve the goals of a proper burning. It's best to plan your last hay cutting or grazing to allow grass to grow back enough before the grass goes dormant. The ideal time to burn is immediately before spring greenup. Although this is hard to predict and may not coincide with desirable weather conditions, it's best to begin planning for a burn around the first of March.

If you've ever been involved in a prescribed burn or wild fire, you know that fire has the potential to quickly change intensity, direction, and become deadly and dangerous. Because of this, a prescribed burn takes proper and thorough preparation. Prior to the burn, plan to lay a fire break of at least 6 feet but ideally 10-12 feet around the edge of a field. You should also plan to lay fire breaks around any structures, equipment, woodlines, or utilities that are present in the field. It's recommended to plow breaks twice to ensure a thorough break in vegetation. Your fire plan should also account for having enough people to assist in managing the fire, having an assigned role for everyone involved and a designated fire boss, and having proper equipment, such as a portable water tank and tractor with plow. You should contact local fire departments or Forestry Commission office for equipment assistance if necessary. You should also contact fire departments prior to the burn so they can anticipate being needed.

Obtain a permit prior to burning. This is easy to do either online or by calling 1-877-OK2-BURN (652-2876). There may be burning restrictions locally that may prevent or delay your burning activities.

If you do not have experience setting prescribed fires or you feel uncomfortable in the least bit, you should consider contacting the Forestry Commission, fire department, or another farmer you know has experience. There are several different aspects to burning that are not common knowledge and take practice, such as when to use a backfire as opposed to a headfire, understanding proper weather considerations, how to use a drip torch, and post-fire inspection. All of these are important to a successful and safe burn. If you are interested in burning your fields but still not sure it's a good idea or what other specifics you need to consider, contact the local Extension office.