# **Burning Bermudagrass Hayfields**

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t will soon be time to burn bermudagrass. Fire can be a valuable management tool but safe and effective burning requires good planning. In this article, I'd like to share some of the ideas on this topic from Bruce Pinkerton, Extension Agronomist at Clemson University; Don Ball, Extension Agronomist at Auburn University; and Michael Hall, Soil Conservation Service.

## Why burn?

Hybrid bermudagrass (Coastal, Tifton 44, Tifton 78, Tifton 85) hay fields can benefit from burning for a variety of reasons:

(1) Spittlebug control.

(2) Control of winter weeds such as henbit, chickweed, and wild onion to give a cleaner first harvest of hay.

(3) Blackened soil surface absorbs more light energy, hastening warming of soil and stimulating earlier growth of bermudagrass.

(4) Water infiltration is improved by removing old thatch layer that resists water and results in more runoff.

(5) Recycles plant nutrients present in old thatch.

#### How often to burn?

Burn whenever it is needed. Properly managed burning is not detrimental to bermudagrass stands.

# Plan ahead for a burn

(J) Allow some growth to accumulate in fall to carry a good fire; this means 4 to 6 inches of dense grass growth.

(2) Check with local authorities if ordinances allow burning. Some places do not allow burning near urban areas and others restrict time of day to burn.

(3) Get a burning permit.

(4) Notify the fire tower, law enforcement agency, and fire department of your burn.

#### When to burn

(1) Just before spring green-up in your area. Be ready to burn by March 1 to take advantage of favorable conditions for burning. (2) Fire lanes 6 to 12 feet should be plowed around the field to be burned. Roads may be OK as fire lanes unless there is dead plant material in it that can ignite and form a fire bridge across the road. It does not take much plant material to carry a fire. Be careful if forested areas are nearby as dead grass and wood ignite easily.

(3) Watch weather forecasts for favorable burn conditions. Do not burn with the wind over 10 mph. Do not burn if the wind direction is such that smoke blows across a travelled road. This can be a serious traffic hazard. Usually wind is less in morning than afternoon.

## **Fire procedures**

(1) On the day of the burn, have phone numbers with you of fire tower and fire department to call immediately if needed.

(2) Set back fires (burning against the wind, a slower but hotter fire) first and allow to burn well into the field before head fire (travels in the direction wind is blowing) is set. Hybrid bermudas such as Tifton 78 should not be burned with a backfire because the very hot fire may damage the exposed stolons. If you happen to have accumulated a thick thatch on a Coastal bermuda hayfield, it may be necessary to use a hot, slow-moving backfire to remove the thatch material.

(3) Set the fire as a fire line rather than at a few points in order to get a smooth burn, using a drip torch or a kerosenesoaked burlap bag attached to a wire, pulling it behind you.

(4) Watch for flammable material that may become airborne and set fires outside the burn area. Paper fertilizer and feed bags, dry manure piles can be potential problems.

(5) Park vehicles upwind from the area to be burned.

(6) Designate someone as fire boss and give complete instructions to all members of the fire crew before you start.

#### After the burn is over

(1) Before leaving the area, check to see that the fire is completely extinguished.

(2) Check the area again. Heavy thatch, especially if damp, can smolder for hours and burn. This is not a problem if in the middle of the field but near the edge, burning material may blow into adjacent areas.

(3) Walk the area near or after dark when smoldering embers are easier to see.

# Don't take shortcuts when burning

Fire is not free! Time and labor are associated with burning. If done incorrectly, it may be costly if it destroys fences, buildings, or vehicles.

