BEEF TIPS

K-STATE Kansas State University

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Upcoming Events

June 3–14
Beef Empire Days
Garden City

August 20–22
Beef Fest
Emporia

PLAN FOR PRESCRIBED BURNING

Spring is in the air! Or is it just smoke from prescribed burns?

Time is fast approaching for the annual spring ritual to burn pastures for the summer grazing season. Using fire on rangeland is a management tool that returns a natural event to the grassland.

The first consideration in prescribed burning is safety, closely followed by effectiveness. Conducting safe and effective burns requires careful planning well in advance of the actual burn time.

People using prescribed burning need to realize the liability and hazards that come with it. People should ensure that hazards are not created for the public and neighbors. State regulations impose some requirements on using prescribed burning; and counties are increasingly adding requirements.

The following is a brief list of the major regulations and safety concerns that need to be included in the planning process.

1. State regulations require the following be done (see Prescribed Burning: Planning and Conducting, L-664 for the full regulations):
   a. Notify the local fire department before burning unless the county requires other actions.
   a. Do not create a traffic safety hazard. If the possibility exists for smoke to blow over a road, notify the appropriate law enforcement or traffic control authority well in advance.
   b. Do not create an airport safety hazard. If the possibility exists for smoke to create a visibility hazard over an airport, notify the airport well in advance.
   c. Supervise the fire until it is completely out.
2. If you're not sure of local or county requirements, contact the local fire chief or emergency preparedness office.
3. Check the burn area to make sure that you have full access with equipment. Also, check the surrounding areas for access in case the fire escapes and you need to protect your neighbor's property.
4. Determine how you will contact emergency assistance if needed. Consider the use of a cellular phone or a radio with access to a phone. The faster help can be reached, the better.
5. Use the complete local weather forecast and conditions to determine if it is safe to burn. NOAA Weather Radio, if available, is the most reliable source. The final decision to burn should be made after 8:30 a.m. and only if the forecast and local conditions fit your burn requirements.
6. The Rangeland Fire Danger Index can be used as a guide. Burn only if the index for the day is in the Moderate category.
7. Notify your neighbors, so they are aware of the upcoming pasture burning. Also, make sure smoke doesn't enter your neighbor's house and other property, and possibly cause damage.
8. Wear natural fiber clothing. Polyester and other synthetic materials can melt and cause serious burns. High-top boots or shoes with pant legs over the top are safest.
9. Have all equipment in good repair and working before the burn begins. Take extra gasoline, oil, and other items that may be needed to keep equipment running.

10. Do you have enough reliable help to do the burn? Consider their fitness and health along with other factors.

Consider using the following checklist to guide your burning efforts. Hope you have a safe burning season!

Prescribed Burning Checklist

Planning the Prescribed Burn

- Inventory the area to be burned together with the surrounding area for fences, buildings, power lines, water sources, streams, roads and gates. Also, identify physical features within the burn area such as natural barriers (streams, rock ledges, tree lines, and little used roads).
- Define the desired prescribed burning conditions in terms of wind speed and direction. Determine which weather forecast source will be used.
- Determine the potential smoke path and develop a management plan.
- Determine where fire guards will be needed.
- Determine where the head fires will be lit.
- Review all regulations and safety requirements during the planning stage.
- Determine if permits will be needed.
- Determine the manpower needed and who will be available.
- Determine the equipment needed and what will be available.
- Develop the notification process to be used.
- Develop contingency plans for possible escaped fires.

"The first consideration in prescribed burning is safety, closely followed by effectiveness."

Conducting the Prescribed Burn

- Monitor weather forecasts and outlooks for several days before the burn.
- Implement notification plan.
- Review burning plan with the crew before beginning the burn.
- Establish the firebreak and widen as needed.
- When firebreaks are fully prepared, light the head fires as rapidly as possible.
- Begin mop up operation as soon as possible.
- When mop up is complete, notify fire department and others of the fact.
- Clean and repair equipment.
- Review the events of the burn and record unusual fire behavior and other unexpected events.

The following, more detailed, publications are available from your local K-State Research and Extension office :

L-815 Prescribed Burning: A Management Tool
L-565 Prescribed Burning: Safety
L-664 Prescribed Burns: Planning & Conducting
L-876 Prescribed Burning: Equipment

Paul D. Ohlenbusch
Extension Specialist
Range and Pasture
Management

HAY MANAGEMENT TIPS: ROUND BALES

It has become quite common for hay to be stored in large round bales. Round balers offer producers advantages by decreasing labor, increasing convenience and reducing haying costs. However, considerable losses in hay quality and quantity can be experienced without proper management techniques.

Cut the plant at the proper stage of maturity. Plant maturity has a major influence on hay quality and quantity. Harvesting hay at the proper plant maturity sustains the hay stand.

Maintain cutting mechanisms. Proper sickle or drum maintenance will efficiently cut the forage cleanly and prevent shattering. Cut hay after the dew is gone and when the topsoil is dry to reduce soil compaction and hasten hay drying. Long stubble hastens drying and improves pickup performance.

Conditioning speeds drying, especially the plant stems. Leave losses are reduced when stem and leaf are drying at the same rate. Consider using chemical conditioning agents when weather conditions reduce optimal drying times.

Tedding can aid in drying windrows. Being too aggressive can dramatically increase leaf loss, hay producers should remember to treat windrows gently.

Rake windrows only when necessary. More leaf loss can be caused by raking than any other harvest operation. Avoid raking when the forage moisture is less than 40 percent.

The ideal windrow formation for round balers is between one-half and near full width of the baler pickup. This width range aids in uniform bale formation within the chamber.

Bale at proper moisture levels. Yield losses of very dry alfalfa hay (less than 15 percent moisture content) can exceed 25 percent. The upper moisture level depends on the type of hay, density and size of the bale, and drying conditions after baling. Normally, the upper limit for moisture for large round bales is between 18 to 22 percent.

Store bales in a well-drained area to minimize spoilage.

Position large round bales end-to-end in long rows for storage. Orient the lines of bales parallel to the direction of the prevailing winds to minimize snow drifting.

Consider indoor storage, tarping or some other means of covering to preserve hay quality and minimize spoilage.

Minimize feeding losses by utilizing bale ring feeders and other management techniques.

Twig Marston
Beef Extension Specialist
Cow/Calf Management

NOW IS THE TIME FOR SPRING-CALVING COW/CALF PRODUCERS TO . . .

April and May are transition months for most spring-calving herds. Relief is spelled "G-R-E-E-N G-R-A-S-S."

Calving Season

- Don't slack off or give up. Managing breeding season length will control calving season. Each cow and calf is important.
- Keep calving area as clean and dry as possible. Give calves a dry, comfortable and clean environment.
- Get colostrum into the calf as soon as possible (first 12 to 24 hours of life).

Cowherd Nutrition

- Supplement and feed cows to maintain or improve body condition prior to the breeding season. Do not stop supplementing cows before grass is ready to handle the cow's nutrient requirements.
- Sort thin and young cows (2- and 3-year-olds) into separate management herds. Increases in energy and protein intakes may be needed to compensate for greater nutrient demands.
- Mineral supplementation should include greater levels of magnesium (15 to 30 grams/head/day or at least 11 percent of the mineral mix) for grass tetany prevention.
- Bulls should be in good body condition prior to the breeding season. Thin bulls could run out of stamina.

Herd Health

- Breeding soundness examinations are recommended for all bulls.
- Maintain top management concerning calf scours (sanitary conditions, early detection, electrolyte/rehydration therapy).
- Vaccinating calves for clostridials, dehorn and castrate males prior to pasture turnout. Implant calves that will be sold at weaning.
- Administer pinkeye vaccine if problems are anticipated.
- Wait for fly control until critical numbers are reached (100 to 200 horn flies per animal).
- If cows are not gathered in the fall now is the time (three weeks prior to breeding season) to vaccinate for reproductive diseases (consult with your veterinarian).
- Deworm cows and bulls if needed.

Forage/Pasture Management

- Use prescribed burning to eradicate cedars and improve forage quality.
- Fertilize cool season pastures at locally recommended rate.
- Plant sudan, sudan hybrids or other summer annuals for haying or grazing. Fertilize according to soil tests.
- Check and maintain summer water supplies.

Reproductive Management

- Palpate and score replacement heifers' reproductive tracts. Cull heifers with infantile tracts.
- Yearling weight of replacement heifers can be used to determine plan of nutrition needed to achieve target breeding weight.
- Consider breeding heifers three weeks prior to the mature cowherd to give them a greater chance to rebreed.
- Consider using MGA and prostaglandin or some other estrous synchronization program and AI to decrease calving difficulty and increase the value of next year's calf crop.
- Plan breeding season and bull turnout. Assign yearling bulls 10 to 15 cows; 2- and 3-year-old bulls 20 to 25 cows, older bulls 25 to 40 cows. Ninety days should be long enough, 65 days optimum.

Genetic Management

- When purchasing bulls, insist on performance records and EPDs to base selection criteria.
- Order semen and AI supplies well in advance of usage. Check semen tanks for leakage.
- Record yearling weights and submit records to breed associations for genetic evaluation.

General Management

- Record calving information permanently.
- Replace lost or worn eartags.
- Good fences make good neighbors.
- Check equipment (sprayers, dust bags, oilers, haying equipment) and repair or replace as needed. Have spare parts on hand, down time can make a difference in hay quality.

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U.S. DEPARTMENT OF AGRICULTURE
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MANHATTAN, KANSAS 66506

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Kansas Feedlot Performance and Feed Cost Summary*

Gerry Kuhl, Extension Feedlot Specialist, Kansas State University

February 1998 Closeout Information**

Sex/No.	Final Weight	Avg. Days on Feed	Avg. Daily Gain	Feed/Gain (Dry Basis)	% Death Loss	Avg. Cost of Gain/Cwt.	Projected Cost of Mar.-Placed Cattle
Steers: 27,527	1,231	149 (135–171)	3.03 (2.55–3.46)	6.93 (6.59–7.42)	1.33	$61.85 (55.78–68.26)	$55.12 (54.00–56.00)
Heifers: 22,131	1,125	146 (124–179)	2.79 (2.58–3.21)	6.93 (6.52–7.28)	1.23	$63.31 (59.52–69.05)	$57.00 (56.00–58.00)

Current Feed Inventory Costs: March 15 Avg. Prices		Range	No. Yards
Corn	$ 2.78/bu	$ 2.60–2.89	7
Milo	$ 4.35/cwt	$ 4.35–4.35	1
Ground Alfalfa Hay	$95.57/ton	$80.00–105.00	7

*Appreciation is expressed to these Kansas Feedyards: Brookover Feed Yards, Brookover Ranch Feedyards, Decatur County Feed Yard, Fairleigh Feed Yards, Kearny County Feeders, Pawnee Valley Feeders, and Supreme Cattle Feeders.

**Closeout figures are the means of individual feedyard monthly averages and include feed, yardage, processing, medication, death loss and usually sold FOB the feedlot with a 4% pencil shrink. Interest charges are not normally included.

K-State, County Extension Councils, Extension Districts, and U.S. Department of Agriculture Cooperating.

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