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Department of Animal Sciences and Industry

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Upcoming Events

August 12 Kansas Hereford Tour August 13

KLA–KSU Ranch Management Field Day Rezac Land & Livestock Emmett

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MAKING QUALITY SILAGE—FACTS AND IDEAS

Silage is an important cropping system in Kansas. Consider the following information when making silage.

Feeding quality and quantity of silage is determined by:

- 1. Value of the crop stored.
 - Corn is the standard for high quality silage.
 - Forage sorghum have about 75% the energy value of corn. Hybrid or variety selection is critical for forage sorghum, and a good rule-of-thumb is to avoid the phenotypic extremes.
 - Sudan grass and sudan-sorghum crosses generally have 65-80% the value of corn silage.
 - Drought stricken crops can make excellent silage, however, energy content of silage is directly related to grain content.
- 2. Moisture content and stage of plant maturity.
 - Whole-plant corn silage should contain 30 to 36% dry matter (66 to 70% moisture) when the kernel is in the 60 to 80% milk-line stage of maturity.
 - Grain sorghum should be harvested at the mid- to late-dough stage of kernel maturity.
 - Moisture content of sudan grass and sudansorghum crosses can be a major problem, wilting will produce satisfactory results. Regardless of the length of the field-wilting period, these forages must be cut at the correct stage of maturity.
- 3. Effectiveness of preservation.
 - Chop corn or sorghum silage at ¹/₄ to ³/₈ inch.
 - The value of fine chopping increases as the plant matures.

- Keep the knives sharp. This will increase machine efficiency, improve packing, decrease cell bruising, and increase palatability.
- A firm pack is necessary to reduce oxidative losses.
- The first three rules of bunker silo management are: PACK, PACK, PACK.
- When packing horizontal silos, add thin layers between packing runs.
- Pack horizontal silos continuously while filling, and continue packing after the last load of the day.
- Crown the silo so that rain will drain off and unsupported and unpacked edges will be eliminated.
- Fill the silo as rapidly as possible. Delayed filling increases dry matter losses and reduces silage quality via reduced respiration and oxidative losses.
- Make piles as deep as practical. This will reduce the percentage of silage exposed to air and help get a firmer pack.
- Fill quickly. Quick filling reduces the time exposed to air and reduces respiration and oxidative losses.
- Use a bacterial inoculant on every load. Inoculant should provide at least 100,000 colony-forming units of viable lactic acid producing bacteria per gram of forage.
- Seal tops of horizontal silos with plastic sheets and tires. Covering silage piles reduces dry matter losses to 20% in the top 3 feet (if unsealed losses will be 50%).
- Losses in very good silage will range from 5 to 15%, whereas losses in a very bad silage will run 25 to 50%. Losses are caused by:

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effluent, respiration, primary and secondary fermentation, and aerobic activity during storage and feed out.

- 4. Feeding management.
 - The height, width, and depth dimensions of your silo should be small enough to allow a rapid progression through the silage mass during the feed out phase.
 - Minimize disturbing the silage face or pile.
 - Leave the silage face as even and perpendicular to the floor and side walls as possible.

Information gathered from:

- Producing and Feeding Sorghum Silage, C-354 K-State Research and Extension.
- Silage Management: Update 1998, Bolsen et.al.
- Proper management assures high-quality silage grains, Mahanna.
- Making Quality Corn and Sorghum Silage, Guyer.
- Feeding Corn and Sorghum Silages to Beef Cattle, Guyer.

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

In August and September, forages are maturing, weaning time is approaching, and weather dictates several key management decisions.

Breeding Season

- If heifers/cows are still showing signs of heat, look for problems such as:
 - Inadequate bull power.
 - Nutritional stress.
 - Inadequate body condition.
 - Reproductive disorders including: IBR, Vibrio, Lepto, cystic ovaries, uterine infections, etc.
- Cull cows that are not conceiving after three or four services by a fertile bull. Remove bulls after 90 days of service (preferably 60 days with cows, 45 days with heifers).

Cowherd nutrition

- Provide ample amounts of clean, fresh drinking water.
- Consider limited-intake creep feeding if:
 - Drought conditions develop and persist.
 - Range conditions limit milk production.
 - Creep feed/grain prices are relatively low.
 - Value of gain allows for economic benefits.
- Tips for successful limited-intake creep feeding:
 Limit duration to last 30 to 75 days before weaning.
 - Limit intake to 1 to 3 pounds/head/day.
 - Use an ionophore or other feed additive to maximize efficiency.
 - Protein level should be equal to or greater than 16%.
 - High salt levels may help limit intake, but can be tough on feeders.
- Pre-purchase bulk rate winter supplementation needs prior to seasonal price increases.

Herd Health

• If pinkeye is likely to be a problem, consider the following preventive and therapeutic measures.

Preventive:

- Make sure herd is receiving adequate vitamins and trace minerals in their diet.
- Consider using a medicated trace mineral package.
- Consider vaccination for pinkeye and IBR.
- Control face flies.
- Clip pastures with tall, coarse grasses that may irritate eyes.
- Provide ample shade.

Therapy:

- Administer an intramuscular injection of long-acting oxytetracycline when symptoms are first noticed.
- Shut out irritating sunlight by patching eyes, shade, etc.
- Control flies.
- Consult your veterinarian.
- Consider revaccinating for the respiratory diseases any animals that will be taken to livestock shows.
- Vaccinate suckling calves for IBR, BVD, PI3, BRSV, and possibly pasteurella at least 3 weeks prior to weaning.
- Revaccinate all calves with 7-way blackleg.
- Vaccinate replacement heifers for brucellosis (4 to 10 months of age).
- Monitor and treat footrot.

Forage/Pasture Management

- Enhance grazing distribution with mineral mixture placement away from water sources.
- Observe pasture weed problems to aid in planning control methods needed next spring.
- Monitor grazing conditions and rotate pastures if possible and (or) practical.
- If pastures will run out in late summer, get ready to provide emergency feeds. Start supplemental feeding before pastures are exhausted to extend grazing
- Use crop residues.

By Justin Gleghorn, Graduate Assistant

- Harvest and store forages properly. Minimize waste by reducing spoilage.
- Sample harvested forages and have them analyzed for nitrate and nutrient composition.
- Plan winter nutritional program through pasture and forage management.
- For stocker cattle and replacement heifers, supplement maturing grasses with an acceptable degradable intake protein/ ionophore (feed additive) type supplement.

Reproductive Management

- Remove bulls to consolidate calving season.
- Pregnancy check and age pregnancies 60 days after the end of the breeding season. Cull cows that are short-bred.

These methods contribute to a more uniform calf crop, make winter nutritional management easier and increases the success rate of next year's breeding season.

General Management

- Avoid unnecessary heat stress—do not handle and (or) truck cattle during the heat of the day.
- Repair, replace and improve facilities needed for fall processing.

LOADER SAFETY-USE CAUTION MOVING ROUND BALES

The following are some safety precautions to follow when working with loaders and moving round bales.

- Do not overfill the loader. Transport the load as low as possible to lower the center of gravity and avoid overturning.
- Move and turn the tractor at slow speeds.
- Set wheels to the widest setting possible to increase tractor stability.
- Do not transport rider(s) unsafely.
- Look up and avoid overhead electric power lines and other obstacles when moving with an elevated front end loader.
- Stop the loader arms gradually when lowering or raising the front end loader.
- Operate the loader from the operator's seat only.
- Always stay out of the area under a raised front end loader, loader attachment or any machine operated by hydraulic power without securely blocking it in position.
- Always use the most level route possible when transporting bales.
- Always level the loader bucket tines as the load is raised to help prevent the load from rolling backwards.
- Keep all shields and protective guards in place and working properly.

- Order supplies, vaccines, tags, and other products needed at weaning time.
- Consider earlier than normal weaning if:
- Drought conditions develop and persist.
- Range conditions limit milk production.
- Cows are losing body condition.
- Facilities and management is available to handle lightweight calves.
- First-calf heifers have the most to gain.
- Resist the temptation to feed the cows without weaning; feeding early weaned calves is more efficient.
- Look for unsound cows that need to be culled from the herd.
- Prepare to have your calf crop weighed and analyzed through a state, regional, or breed performance testing program.
- Document cost of production by participating in Standardized Performance Analysis (SPA) programs.
- Plan your marketing program, including private treaty, consignment sales, test stations, production sales, etc.
- Attend KLA/KSU Grazing Management Field Day, August 5th and/or 13th.

"Plan your marketing program, including private treaty, consignment sales, test stations, production sales, etc."

By Twig Marston, Extension Cow/Calf Management Specialist

Upcoming Events con't

August 14–15 Kansas Angus Tour

August 15 Polled Hereford Tour

August 15 Kansas Gelbvieh Tour

August 20–21 K-State Risk and Profit Conference

> August 22 Kansas Brangus Tour

August 22 Barber County Cattlemen's Tour

> August 21–23 Flint Hills Beef Fest

August 27 Wabaunsee Co. Ranch and Range Tour

> September 11–20 Kansas State Fair

September 18–21 Kansas Junior Livestock Show Department of Animal Sciences & Industry 244 Weber Hall MANHATTAN, KANSAS 66506

Kansas Feedlot Performance and Feed Cost Summary*

Gerry Kuhl, Extension Feedlot Specialist, Kansas State University

June 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 July-Placed Cattle
Steers: 28,201	1,205	154 (127-202)	3.22 (2.83-3.61)	6.07 (5.69-6.55)	1.20	\$53.97 (50.44-60.58)	\$49.17 (45.00-54.00)
Heifers: 19,892	1,098	160 (130-233)	2.85 (2.21-3.30)	6.44 (5.83-7.30)	1.53	\$57.98 (52.78-62.48)	\$51.33 (46.00-58.00)
Current Feed Inventory Costs: July 15 Avg. Prices				Range		No. Yards	
Corn	\$ 2.64/bu		\$ 2.34-2.80		7		

Corn\$ 2.64/buGround Alfalfa Hay\$81.14/ton

*Appreciation is expressed to these Kansas Feedyards: Brookover Feed Yard, Brookover Ranch Feed Yards, 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.



\$70.00-92.48

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