



Angus Advisor

► AUGUST herd management tips

Southern Great Plains

by **David Lalman**, Oklahoma State University, dlalman@okstate.edu

Spring-calving herds

1. A self-limited, high-protein creep-feeding program (such as the Oklahoma Silver program) enhances weight gain without causing calves to become excessively fleshy, because intake is limited to around 1 lb. of supplement per head per day. After about 30 days of creep consumption, a salt concentration of around 10% may be required to achieve this low level of intake.
2. Evaluate body condition of young cows.

Wean the calf in August or early September if the cow BCS is 4 or lower (on a 9-point scale; see www.cowbcs.info for more information on how to condition score your cows).

3. Secure the appropriate products and supplies for the fall herd health program.
4. If the cow herd can be gathered during August or September, an effective strategy is to vaccinate calves two to six weeks prior to weaning and again at weaning. In fact, many value-added health programs recommend this protocol to maximize immune response in weaned calves.

Fall-calving herds

1. Yearling replacement heifers grazing native pastures may benefit from a small package (around 1 lb. per day) of high-protein supplement in order to ensure adequate growth and development prior to breeding in November.
2. Calves that were first vaccinated at weaning require booster vaccinations within two to four weeks.
3. Calving season begins in mid- to late August for most fall-calving herds. Purchase calving supplies and prepare ID tags. The incidence of dystocia due to heavy birth weight is lower in fall-calving systems. However, producers should still be prepared to deal with occasional dystocia cases associated with abnormal presentations.

General recommendations

1. When it comes to hay, information is power. Extremely high purchased feed costs result in more dramatic differences in value of low- vs. high-quality hay. For example, a year ago, the difference in value of 7% protein, 49% TDN Bermuda grass hay and 12% protein, 55% TDN Bermuda grass hay was about \$25 per ton. This year, the difference in value is approaching \$60 per ton. On one hand, this difference points out the magnified value of working hard to harvest high-quality hay. On the other hand, this difference suggests that being in the hay market, whether buying or selling, without the powerful information provided by a forage test is rather foolish. Nutrient analyses are inexpensive at \$15 to \$45 for most service packages. Most commercial laboratories can return results

within about 72 hours. A list of certified commercial laboratories is available at www.foragetesting.org.

2. Continue a fly and tick control program for all cattle. The incidence of pinkeye is particularly high during late summer. Fly control is one key management factor in minimizing the spread of this disease.
3. Harvest Sudan grass and Sudan hybrids for hay in the boot stage, which generally corresponds to a height of 3-4 ft. A routine nitrate test on forage before harvesting may be advisable, particularly if soil moisture has been scarce prior to harvest.
4. Consider managing a portion of Bermuda grass and fescue pasture for late-summer fertilization and fall grazing. Standing forage should be removed by haying or grazing during early August. Fifty lb. of nitrogen fertilizer should be applied during mid- to late August. Depending on rainfall, forage accumulation has ranged from about 20 lb. to 40 lb. of forage per pound of nitrogen fertilizer applied. Stockpiled forage can be grazed from October through December, and protein concentration is frequently between 10% and 15% of DM.
5. Treat cattle for grubs after heel fly activity ceases and before larvae reach the back, generally between July 1 and Oct. 1.
6. Early to mid-August is about the latest a person can spray sericea lespedeza and expect to achieve reasonable reductions in the plant population the following year.
7. Identify other pasture weed and brush problems to aid in planning control methods needed next spring and summer.
8. Adjust stocking rate and grazing system to control undesirable plants and forage accumulation for prescribed fire.

Southeastern Region

by **Jane Parish**, Mississippi State University, jparish@ads.msstate.edu

General recommendations

Hot weather concerns. As the thermometer rises, the likelihood of experiencing cattle production losses from heat stress increases. Heat stress occurs when cattle cannot adequately dissipate body heat. Heat stress can lower feed and forage intake, reduce growth performance, depress milk production, negatively affect reproductive performance, and even result in death under extreme circumstances. The high humidity experienced throughout the Southeastern U.S. only makes hot conditions worse. Water evaporation from cattle decreases when the humidity climbs, making body heat dissipation more difficult.

During periods of hot weather and high humidity, observe cattle frequently and take

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Guide to abbreviations and acronyms

To make the "Angus Advisor" more concise and consistent, we have used the following abbreviations or expressions:

\$Values	dollar value indexes
AI	artificial insemination
ADG	average daily gain
BCS	body condition score
BLV	bovine leukemia virus
BMP	best management practices
BQA	beef quality assurance
BRD	bovine respiratory disease
BRSV	bovine respiratory syncytial virus
brucellosis	Bang's disease
BSE	bovine spongiform encephalopathy
BVD	bovine viral diarrhea
Ca	calcium
DM	dry matter
EPD	expected progeny difference
FMD	foot-and-mouth disease
GnRH	gonadotropin-releasing hormone
IBR	infectious bovine rhinotracheitis
ID	identification
IM	intramuscular
in.	inch
lb.	pound
lepto	leptospirosis
Mg	magnesium
MiG	management-intensive grazing
MLV	modified-live virus
N	nitrogen
P	phosphorus
PI	persistent infection
PI ₃	parainfluenza-3 virus
preg-check	pregnancy-check
Se	selenium
sq. ft.	square feet
TB	bovine tuberculosis
THI	temperature-humidity index
trich	trichomoniasis
Zn	zinc

precautions to prevent heat-stress-related losses. Signs of overheating can appear suddenly. Cattle release heat by sweating, panting (taking rapid breaths to evaporate water from the lungs) and increasing blood flow to skin surfaces. Panting usually begins once rectal temperatures reach 104° F or higher and may be accompanied by drooling. Water intake also increases, especially if cool water is available.

In bulls, heat stress can negatively affect proper sperm production. Adequate temperature regulation of the testes is essential for sperm production. Bulls experiencing heat stress may need at least two months to recover fully. A bull evaluated for breeding soundness one month after undergoing severe heat stress may not yet have adequate sperm motility and morphology for good reproductive performance.

Bulls fed high-energy diets postweaning may be at greater risk for increased scrotal temperatures than bulls fed only moderate-energy diets. High-energy diets contribute to metabolic heat load in cattle. In addition, low-quality forages with more fiber produce more heat than less-fibrous forages during fermentation.

Nutritional management. Plan winter grazing and feeding programs in advance. Evaluate cool-season pasture options and

byproduct commodity alternatives in relation to herd needs. Stocker operators should continue to be flexible in determining the number of head to purchase, and then stock pastures according to current and projected available forage amounts. Portable electric fencing is an excellent tool for implementing rotational-grazing, limit-grazing, strip-grazing or creep-grazing systems. MiG systems are essential for stretching forage supplies and associated expense outlays to improve profit margins. Provide proper mineral supplementation and fresh water at all times, checking these supplies often.

Continue summer weed and brush control efforts. Manage pastures to rotationally graze young growth or harvest excess forage for hay. Overgrown pastures may need to be clipped. Watch Dallis grass pastures for ergot contamination, and clip seedheads if necessary. Avoid grazing heavily nitrogen-fertilized Sudan grass, sorghum-Sudan hybrid or pearl millet pastures during drought or cool, cloudy weather. If cattle are grazed on these pastures, they should be observed carefully for signs of nitrate poisoning.

Continue harvesting Bermuda grass hay at four- to five-week intervals for optimum forage maturity and quality. Fertilize hay fields between cuttings or on a regular interval to replace soil nutrients removed by hay production and improve hay yield and quality. Using soil tests for fertilization program planning can help optimize fertilizer investments. Record hay yields, forage-test

each cutting, and develop a hay storage program that will minimize storage losses and allow matching of forage test results with individual lots of hay for use in hay feeding and supplementation decisions. Inventory hay supplies and determine if additional hay is needed. Continue to maintain hay-harvesting equipment.

Health management. Practices that reduce cattle stress are beneficial during hot weather. Arrange to work cattle during cooler parts of the day instead of during the heat of the day. If possible, try to work cattle early in the morning before the temperature rises to uncomfortable levels. Make an effort to limit the amount of time cattle must spend in a confined area with limited air movement when working cattle. If cattle remain in a confined area for an extended period, provide access to fresh, cool water.

Make sure adequate shade is available for cattle in the summer months. Artificial shades should be constructed to be from 7 ft. to 14 ft. high and covered with shade cloth to allow air movement. A minimum recommendation is to provide shade at 80% of the requirement. Minimum shade requirements are 18 sq. ft. per head for 400-lb. calves and 25 sq. ft. per head for 800-lb. stockers.

The season for horn and face flies continues. Monitor fly numbers to determine if additional fly control measures are needed. Remove insecticidal fly tags as they become ineffective, and implement additional fly

Western Region

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Fall-calving herds

The main focus is to prepare for the calving season.

Genetic management

Sire selection. The start of the breeding period is months away; however, now is the time to start developing a list of potential AI sires. For most successful purebred producers, sire evaluation is a continual process that never ends. In my opinion, it is the most important management decision that is made each year in a purebred or seedstock operation of any species.

The marketability of progeny is a major factor in determining sires to use. However, as we have discussed a number of times during the past year, it is important to use sires that produce daughters that will be productive and contribute to herd improvement.

Reproductive management

Vaccinations. If any precalving vaccinations, such as a scour vaccine, are going to be administered, they should be given far enough in advance of the calving season to avoid handling cows that are extremely close to parturition.

Calving supplies and equipment. Be sure that equipment is in working order and supplies are on hand to assist females once calving starts. In addition, if injections such as selenium are going to be administered at birth, be sure that an adequate supply of those products is on hand.

Nutritional management

Mineral supplementation. Be sure cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. Minerals should be supplemented on a year-round basis and can be varied depending on the time of year and available forage resources. Mineral boluses or injectable products can be used in addition to loose or block mineral products.

Body condition. The target level of body condition at calving is a minimum BCS of 5.0 for mature cows and 6.0 for 2-year-old heifers (9-point scale). Ideally, level of body condition should be maintained or improved during the breeding season. However, this is difficult to achieve, especially with cows that have high levels of milk production. Level of milk production more heavily influences nutritional requirements in lactating females than does frame size.

Protein and energy supplementation. Both protein and energy requirements need to be met in order to achieve the desired level of body condition as described previously. If cows are grazing dry native forage, typically protein is more limiting than energy. The cost of any supplement is going to be very challenging this year.

Be sure that you are pricing supplements on a cost per unit of protein or energy depending on which nutrient is most limiting in your situation. In situations where forage quality is limited but there is plenty of forage or pasture available, protein will be the more limiting nutrient. In situations where forage quantity is lacking, such as drought, then typically energy will be the more limiting nutrient.

control methods. Continue to watch for pinkeye problems.

Consider options for anaplasmosis control, as biting insects remain abundant. Internal parasite control practices are another component in a complete herd health program developed in consultation with a veterinarian. Check cattle for cancer eye and foot rot. BQA-consistent practices should be included in the health program. Vaccinate all calves more than three months old for blackleg. Check with a veterinarian for state guidelines on calfhood brucellosis (Bang's disease) vaccination programs for heifers.

Many states offer disease monitoring and certification programs for beef cattle operations. John's disease and PI-BVD programs are examples of animal health programs available in the region. Ask a local or state veterinarian about available state animal health programs.

Apply for a ranch premises ID number from your state veterinarian's office if not already done. This is a key component of disease and disaster preparedness for beef cattle operations throughout the entire region. Producers with valid premises IDs should consider use of official 840 ear tags for animal ID. Work to develop a ranch-level disease and disaster preparedness plan. Local Extension agents and veterinarians can assist in these planning efforts.

Marketing and financial management. With record input prices, managing operations based on unit cost of production

is now more critical than ever. Small- and large-scale producers alike may benefit from forming alliances with neighbors for group cattle marketing and bulk input purchase endeavors. Continue good production and financial recordkeeping. With relatively high input price levels, enterprise budgeting and cash flow analyses are worthwhile exercises. The information from these budgets and reports can be used to make knowledgeable production and marketing decisions.

Spring-calving herds

Calf preconditioning, weaning and marketing. Plan for fall cattle working by determining vaccination, deworming and implant needs by acquiring supplies ahead of time. Make sure fences where weaned calves will be placed are in good shape, and repair fences where needed. Wean calves based on market and pasture conditions using weaning strategies that minimize calf stress. Avoid weaning calves during extremely hot periods if possible, and arrange for calf comfort during these times. Make sure that registered cattle are weaned within weaning age windows accepted by the respective breed associations.

Report weaning data on registered cattle to breed associations in a timely manner. Weaning performance reports should be used by both seedstock and commercial operations in determining which cattle to retain and which cattle to market. Monitor herd performance and nutritional status by recording weights and cow BCS at weaning.

Assess weaning percentage (calves weaned per cows exposed to breeding) and cow efficiency (calf weight per cow weight).

Plan to wean calves at least 45 days before shipment of calves off the ranch. To precondition calves, vaccinate and revaccinate for respiratory and other diseases based upon veterinary advice. Castrate and dehorn late calves if not done previously. Train calves to eat from a bunk and drink from a water trough during the preconditioning period. Continue a high level of nutritional management for early-weaned calves.

Run a breakeven analysis on retained ownership options, including stocker and finishing programs, and consider risk management strategies before finalizing marketing plans. Calf verification programs may be an attractive option for feeder calf marketing. Prepare for special feeder calf sales as appropriate. Breeders should share information on breed association-sponsored feeder-calf marketing programs with bull customers to help in marketing their calves.

Breeding herd management. Allow bulls to rest and regain condition in small pasture traps on an adequate nutritional program. Market bulls that will not be used in future breeding seasons. Review and complete breeding records, including heat detection records, AI dates, dates bulls were turned in and out, ID of herd females and breeding groups, dates bred, returns to heat, and expected calving dates.

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Heifer development. The developmental period from weaning until breeding time is critical in terms of influencing the future productivity of females. Females should be developed to reach approximately 65% of their projected mature weight at the start of the breeding period. This ensures that they should reach puberty far in advance of the breeding period and thus will experience a couple of estrous cycles before they are bred the first time. This is critical, as fertility improves greatly as females mature from their pubertal estrus to the third or fourth estrus.

Health management

Treatment protocol. Have treatment protocols and products on hand for both scours and pneumonia in suckling calves. It is well-advised to have first and second treatment options for both conditions.

Spring-calving herds

The main focus is that cows and calves are on cruise control.

Reproductive management

Natural service bulls. Bulls should be turned out and hopefully are doing their job.

Watch for return heats from natural service dates, and if a high percentage of females are coming back into heat, switch sires if that is an option.

Nutritional management

Mineral supplementation. As discussed in previous columns, it is important that minerals be supplemented on a year-round basis. Supplements should be formulated to meet deficiencies specific to your region or area.

Protein and energy supplementation. Most spring-calving cows in the West graze irrigated pastures. Typically cows grazing irrigated pastures are receiving adequate levels of both protein and energy and, therefore, supplementation is not needed.

General management

Castration of bull calves. As we have discussed in previous columns, castration of lower-end bull calves is a management option that needs to be considered to allow us to be able to deal with the high feed costs associated with developing bulls. Some producers are reluctant to do this because of the effect it has on contemporary groups and performance records. In addition, in most purebred programs there is not a lot of profit in selling a \$600 weaned steer calf.

As I am writing this column, it is hard to predict exactly where corn prices are going to end up. However, it is relatively certain that we are going to face the highest feed costs that we have ever faced this winter. At \$4 per head per day, bulls eat up any profit pretty fast. Many producers have gone to developing both bulls and heifers in a drylot; however, development on pasture with limited supplementation may have to be re-evaluated.

Plan to pregnancy-check herd females about 60 days after the end of the breeding season. Consider marketing late-calving females that do not fit the chosen calving season. Implement an effective culling procedure for less productive or problem cattle. After weaning, cull cows based on pregnancy status, soundness (eyes, udders, feet, legs and teeth), health status and performance records.

Develop plans for marketing cows based

on market conditions and cow body condition. Manage market cows in keeping with BQA guidelines. Establish permanent ID (tattoos or brands) for bred heifers that will remain in the herd, and make plans to market open heifers.

Nutritional management. Consider creep-feeding calves depending on marketing plans and pasture conditions or to introduce them to feeds prior to weaning. Put a heifer development program in action to reach target breeding weights by the start of the next breeding season, keeping an eye on declining forage quality. Initiate a feeding program to make sure bulls are in good

condition (target BCS of 6) at the start of the next breeding season. Provide additional nutrients to thin or growing bulls.

Fall-calving herds

Breeding herd management. Maintain bulls in small pasture traps with effective fences, and manage bulls to start the next breeding season in good condition. Begin to evaluate herd sire options for the next breeding season. Continue to monitor heifer development by checking weights and adjusting nutrition to meet breeding targets later this year.

Calving management. Prepare for the

upcoming fall-calving season. Cows need to be in moderately good condition prior to calving. Purchase or assemble calving supplies, including calf ID tags and obstetric equipment. Move fall-calving heifers and cows close to handling facilities and observe cattle frequently. Manage late-gestation females in calving pastures with adequate shade.

Midwest Region

by **Twig Marston**, University of Nebraska, tmarston2@unl.edu

August is when forages are maturing,

weaning time is approaching and weather is dictating several key management decisions.

Breeding season

1. Look for unsound cows that need to be culled from the herd. Feet and legs, udders, eyes, disposition, and fleshing ability can be considered in some keep/cull programs.
2. Identify cull prospects. Cull the cows that are “reproductively slow” from AI and/or natural service.
3. Limit the breeding season. Remove bulls after 60 days with cows, 45 days with heifers. Length of natural service season can

vary depending if estrus synchronization has been implemented.

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

Herd health

1. If pinkeye is likely to be a problem, consider the following preventive and therapeutic measures:
 - ▶ Make sure the herd is receiving adequate vitamins and trace minerals in its diet.

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- ▶ Consider using a medicated trace-mineral package.
- ▶ Consult your veterinarian about developing a preventive health program that includes pinkeye control.
- ▶ Control face flies.
- ▶ Clip pastures with tall, coarse grasses that may irritate eyes.
- ▶ Provide ample shade.
- ▶ Administer an IM injection of long-acting oxytetracycline when symptoms are first noticed.

- ▶ Shut out irritating sunlight by patching eyes, providing shade, etc.
 - ▶ Control flies.
 - ▶ Always consult your veterinarian on the best treatments available.
2. Develop a vaccination/health program for show cattle.
 3. Vaccinate suckling calves for IBR, BVD, PI₃, BRSV and possibly pasteurella at least three weeks prior to weaning.
 4. Revaccinate all calves for blackleg.
 5. Vaccinate replacement heifers for brucellosis at 4-10 months of age.
 6. Monitor and treat foot rot.

Forage/pasture management

1. Enhance grazing distribution with mineral feeder/supplement placement.
2. Observe pasture weed problems to aid in planning control methods needed next spring.
3. Monitor grazing conditions and rotate pastures if possible and practical.
4. If pastures will run out in late summer, get ready to provide emergency feeds. Start supplemental feeding before pastures are gone to extend grazing. Rotational grazing can be an effective forage management system and increase harvest efficiency of grazed lands.

5. Harvest and store forages properly. Minimize waste while raking, baling and storing mechanically harvested feeds.
6. Forage-test harvested forages for nitrate content and nutrient composition.
7. Plan a winter nutritional program through pasture and forage management.
8. For stocker cattle and replacement heifers, supplement maturing grasses with an acceptable degradable intake protein (DIP)/ionophore (feed additive)-type supplement.

General management

1. Avoid unnecessary heat stress — don't

handle or truck cattle during the heat of the day.

2. Repair, replace and improve facilities needed for fall and winter activities.
3. Order supplies, vaccines, tags and other products needed at weaning time.
4. Consider weaning earlier than normal if:
 - ▶ drought conditions develop and persist;
 - ▶ range conditions limit milk production;
 - ▶ cows lose body condition; or
 - ▶ facilities and management are available to handle lightweight calves.
 First-calf heifers have the most to gain from early weaning.
5. Resist the temptation to feed cows without

weaning; feeding early-weaned calves is more efficient than feeding lactating cows.

6. Prepare to have your calf crop weighed and analyzed through your state, regional or breed performance-testing program.
7. Consider your marketing options. AngusSource® is an excellent program developed for Angus genetics. AngusSource is a U.S. Department of Agriculture (USDA) Process Verified Program (PVP) for Angus-sired calves that documents source, group age and a minimum of 50% Angus genetics.

