MANAGEMENT

Angus Advisor

▶ **JULY** herd management tips

Southeastern Region

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General recommendations

Water management. Water is the most important nutrient for cattle. Providing adequate and high-quality water supplies at all times is a must, especially during the summer months. If poor cattle performance or health arises, consider evaluating water quality. Testing water for anti-quality factors can help diagnose suspected problems.

Water intake is highest in summer, intermediate in spring and autumn, and lowest in winter. Providing shade in summer can reduce water intake. Temperature increases from 50° F to 90° F can increase daily water requirements by 2.5 times. According to the most recent edition of the *Nutrient Requirements of Beef Cattle*, a 400-lb. growing calf requires approximately 5.8 gal. of water per day when the temperature is 70° F. This increases to 9.5 gal. per day when the temperature reaches 90° F. As the size of the calf increases, water requirements also rise. For a 600-lb. calf, daily water intake needs are 7.8 gal. at 70° F and 12.7 gal. at 90° F.

High humidity levels are common in this region. The combined effect of both temperature and humidity on cattle is important to consider. Humidity can intensify the effects of environmental temperature on livestock comfort, water intake, feed intake and performance. The temperature-humidity index (THI) serves as a useful indicator of the simultaneous temperature and humidity conditions livestock experience. The livestock weather safety index classifies THI values as normal, alert, danger or emergency conditions for cattle. Water intake increases when the THI goes above 75.

Nutritional management. 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. These 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.

Stay on top of summer weed and brush control. Allow remaining cool-season annual legumes to reseed. 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 results for 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. Continue to maintain hay harvesting equipment.

Health management. During periods of hot weather and high humidity, observe cattle frequently and take precautions to prevent losses related to heat stress. Arrange to work cattle during cooler parts of the day. Try to work cattle early in the morning before the temperature rises to uncomfortable levels. 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. Practices that reduce cattle stress are beneficial during hot weather.

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.

Horn and face fly season is now well under way. Continue the fly control program, keeping a close eye on fly numbers. Consider the type of fly control chemicals (organophosphate, organochloride or pyrethroid) used last year, and rotate chemical classes. Remove insecticidal fly tags as they become ineffective, and implement additional fly control methods. Watch for pinkeye problems. Consider options for anaplasmosis control as biting insects remain abundant. Internal parasite control practices

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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 synctial virus
brucellosis	Bang's disease
BSE	bovine spongiform encephalopathy
BVD	bovine viral diarrhea
Ca	calcium
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

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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 3 months old for blackleg. Check with a veterinarian for state guidelines on calfhood Bang's vaccination programs for heifers.

Many states offer disease monitoring and certification programs for beef cattle operations. Johne'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 the 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. Small- and large-scale producers 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

Calving and calf management. Calving should be completed, and calving records should be well-organized now. Review calving ease scores and dam body condition at calving records. Calf registration expenses generally increase as calves age, so submit calving information early to breed associations to take advantage of lower fees. Consider marketing late-calving females that do not fit the chosen calving season.

Breeding management. Remove bulls from breeding pastures if not done already. Keep bulls in small pasture traps on an adequate nutritional program and with adequate fencing, and market bulls that will not be used in future breeding seasons. Observe cows and heifers for returns to heat. Confining cattle to a limited grazing area makes this easier. Review and complete breeding records, including heat detection records, AI dates, dates bulls are turned in and out, ID of herd females and breeding groups, dates bred, returns to heat, and expected calving dates. Plan to pregnancy-check herd females about 60 days after the end of the breeding season. Establish permanent ID (tattoos or brands) for bred heifers that will remain in the herd, and make plans to market open heifers.

For AI programs, obtain semen and other needed supplies, and prepare facilities for breeding. Implement a proper heat synchronization protocol if desired. AI cattle about 12 hours after observation of standing heat. Maintain good breeding records, including heat detection records, AI dates, dates bulls turned in and out, ID of herd females and breeding groups, dates bred, returns to heat and expected calving dates.

Nutritional management. Continue to monitor body condition of the breeding herd. Supplement the forage program if cows are thin or forage quantity or quality is

limiting. Place cattle with the highest nutritional needs (growing cattle, and lactating first-calf heifers and cows) on the highest-quality grazing and hay pastures. Consider creep-feeding calves depending on marketing plans and pasture conditions. 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. 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.

Select replacement heifers based on performance and other relevant factors. Establish permanent ID (tattoos or brands) for bred heifers that will remain in the herd. Plan a heifer development program based on nutritional resources and gain needed to reach target breeding weights.

Calf preconditioning, weaning and marketing. To precondition calves, vaccinate and revaccinate for respiratory and other diseases based upon veterinary advice. Plan to wean calves at least 45 days before shipment of calves off the ranch. Wean calves based on market and pasture conditions if not already weaned. Make sure fences where weaned calves will be placed are in good shape, and repair fences where needed. Implement weaning strategies, such as fenceline weaning, that minimize calf stress. Train calves to eat from a bunk and drink from a water trough during the preconditioning period. This is a good time to castrate and dehorn late calves if not done previously. Continue a high level of nutritional management for early-weaned calves.

Make sure registered cattle are weaned within weaning age windows accepted by the respective breed associations. Record weaning weights and cow BCS as measures of animal and herd performance and nutritional status. Calculate and evaluate weaning percentage (calves weaned per cows exposed to breeding) and cow efficiency (calf weight per cow weight). 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.

Consider optimum marketing times and methods for fall-born 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.

Midsouth Region

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Spring-calving herds

Breeding bulls should be removed from the cow herd after 60-90 days.

Calf performance can be enhanced during

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summer months by creep-feeding or creep-grazing. This year, these practices will have to be evaluated with a sharp pencil as cost per pound of additional gain is likely to be very expensive.

This year throughout most of the Midsouth Region soil moisture, and therefore forage quality, is excellent.

Check with your veterinarian regarding the potential value of deworming nursing calves during mid- to late summer. Response to the anthelmintic will vary substantially depending on the region, local conditions, grazing intensity and previous parasite management.

Fall-calving herds

Wean fall-born calves before the middle of July to allow cows time to regain body condition before calving again. Calf performance is probably marginal this late anyway.

At weaning, vaccinate calves according to your veterinarian's recommendations, deworm calves, preg-check cows and heifers, weigh and estimate condition scores of cows, and weigh calves. Transfer records for your whole herd to the American Angus Association.

A small package of high-protein supplement, such as supplement in the Oklahoma Gold program, can facilitate around 2 lb. ADG on weaned heifers and bull calves grazing abundant native pastures during July, August and September. A strategic deworming program and the inclusion of a feed additive such as Bovatec,® Rumensin® or chlortetracycline are important features in this program.

General recommendations

Many producers in our region have an abundance of *low*-quality hay left over from last year. Plan to feed this hay as early as possible in the coming year, and/or to cattle with low nutrient requirements (such as dry cows during the middle trimester of pregnancy).

With dramatically higher feed and fertilizer costs, it is imperative producers be diligent about putting up high-quality hay. Harvest hay in earlier stages of maturity to reduce or eliminate the need for supplementation.

Another simple principle that will help keep production costs down is to use moderate to low stocking rates. This minimizes the need for supplementation as cattle can selectively graze a higher-quality diet, and it minimizes the need to feed hay during winter.

Remove intensive early stocking cattle from native grass pastures by July 10.

Continue fly and tick control programs 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.

Harvest Sudan grass and Sudan hybrids for hay in the boot stage, which generally corresponds to 3 ft. to 4 ft. in height. A routine nitrate test on forage before harvesting may be advisable, particularly if soil moisture has been scarce prior to harvest.

Western Region

*by **Randy Perry,** California State University, Fresno, randyp@csufresno.edu*

For this month's column, I am going to discuss a topic that would apply to both fall- and spring-calving cow herds.

The purebred beef business has always been very cyclical, and I believe we may be moving into a time different than we have ever experienced. If feed, fuel and fertilizer costs stay anywhere close to current levels, I believe we are going to be challenged to survive in agriculture like never before. I have no idea how it is going to play out, but I think it is important for purebred beef producers to evaluate their production and marketing plans and try to position themselves not only to survive but to be successful in the future.

In my opinion, the number of commercial cow-calf producers in this country is going to continue to decline. The average age of this group of producers just keeps climbing, and very few young people are getting involved in this segment of the business. Somebody is going to have to manage these cows, and I hope it will continue to be, for the most part, independent, family-owned operations. This segment has experienced a good run in terms of profitability during the last five-year period; however, the next five years will be more challenging.

We continue to see more producers transitioning into recreation and tourism in order to improve the profitability of their operations. In California we are also seeing more producers adding or switching over to stocker or grass operations vs. the traditional cow-calf operation. I am concerned about the potential effect of these changes on the main source of income for most purebred operations in the West — the sale of bulls to commercial producers.

The other big factor in this equation is drought and its effect on cow numbers. In California, we have experienced pretty dry conditions in many areas of the state during the last two winters. Thus we have seen drastic reductions in terms of cow numbers. Some regions of the country are rebuilding after periods of drought, which creates opportunities for increased bull sales. However, regardless of whether or not you are experiencing good pasture conditions in your area of the country, $6 corn and $200 hay has driven development costs on bulls to extremely high levels, and these costs have a major influence on the profitability of selling commercial bulls.

Are there still going to be opportunities for profit when selling commercial bulls? Yes, I think those opportunities still exist. However, I think those opportunities will be less plentiful and fruitful, and it will continue to be more difficult for smaller producers to take advantage of these opportunities. I believe a larger portion of commercial bull sales will continue to be captured by larger producers who can offer other benefits as part of their marketing programs.

Therefore, it is important for smaller purebred breeders to critically evaluate their goals in terms of production and marketing plans. Some producers may decide to switch the focus of their operation to the production of show cattle, as many producers have done in the eastern United States for years. In those operations, the majority of the bull calves are castrated and the top end of the heifer and steer calves are marketed and sold as show prospects.

I have no idea which type of operation will be most profitable in the future. However, I think it is important for each producer to sit down and critically evaluate their goals and business plan. If changes need to be made, now is the time to make them. If you decide to change the focus of your operation from selling commercial bulls to show cattle, then many aspects of your operation, such as sire selection, advertising and the focus of your marketing plan, need to change.

Although the answers are difficult, the questions are important. Strategic planning and setting long-term and short-term goals have always been important for any type of business or operation. Because of the challenges that lie ahead for this industry, any time we can spend focusing on these aspects of our operations will serve us well.

Treat cattle for grubs after heel fly activity ceases and before larvae reach the back, generally between July 1 and Oct. 1.

Closely monitor water source quantity and quality during hot, dry summer months. Concentration of minerals and other compounds can become excessive (toxic) in stagnant water sources during extended dry periods.

Midwest Region

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

July and August are months when forages are maturing, weaning time is approaching and weather dictates several key management decisions.

Breeding season

- Limit the breeding season by removing bulls after 60 days with the cows and 45 days with the heifers. Cull cows that have not conceived after three or four services by a fertile bull and/or a well-run AI program. These steps will contribute to a more uniform calf crop, making winter nutritional management easier and increasing the success rate of next year's breeding season.
- Keep accurate and complete breeding records. Store records in safe places, and make sure they are organized and legible.

Herd nutrition

- Provide ample amounts of clean, fresh drinking water.
- If drought conditions set in or persist, July can be a major decision month. Creep-feeding will provide the least amount of drought relief; early weaning and culling cows will have more dramatic effects on stretching forage supplies.
- Prepurchase bulk-rate winter supplements prior to seasonal price increases.

Herd health

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

  Prevention: Make sure the herd is receiving adequate dietary vitamins and trace minerals. Consider using a medicated trace-mineral package and vaccinating for pinkeye and IBR. Control face flies. Clip pastures that have tall, coarse grasses that may irritate eyes, and provide ample shade.

  Therapy: 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. Consult your veterinarian.
- Consider revaccinating show animals for respiratory diseases. Vaccinate suckling calves for IBR, BVD, PI_3, BRSV and possibly pasteurella at least three weeks prior to weaning. Revaccinate all calves for blackleg. Vaccinate replacement heifers (4-10 months of age) for brucellosis.
- Monitor and treat foot rot.

Forage/pasture management

- Observe pasture weed problems to aid in planning the control methods needed next spring.
- Monitor grazing conditions and rotate pastures if possible and practical. Enhance grazing distribution by placing the minerals away from water sources. If pastures won't last all summer, get ready to provide emergency feeds. Start supplemental feeding before pastures are gone to extend grazing.
- For stocker cattle and replacement heifers, consider supplementing mature grasses with an acceptable level of degradable intake protein and ionophore (feed additive).
- Harvest and store forages properly. Minimize waste by reducing spoilage. Sample harvested forages, and have them analyzed for nitrate and nutrient composition.
- Plan your winter nutritional program through pasture and forage management. This can be the start of stockpiling forage supplies for fall and winter grazing.

General management

- Avoid unnecessary heat stress. Don't handle or transport cattle during the heat of the day.
- Repair, replace and improve facilities needed for fall processing.
- 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 lose body condition, or facilities and management are 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 your state, regional or breed performance-testing program.