MANAGEMENT

Angus Advisor

► **APRIL** herd management tips

Mid-South Atlantic

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General recommendations

Nutritional management. Input cost management continues to challenge beef cattle producers in the Mid-South Atlantic Region to find new ways to improve production efficiencies. Reducing winter feed cost and improving nutritional program effectiveness are key areas for improvement on many cattle operations.

It is not too early to begin planning the feed supply for next winter. Locate sources of commodity feedstuffs available in your area. Start tracking feed prices to find the best values on feed supplies for the nutrient composition. Seasonality of feedstuff supplies affects both availability and price, and practical availability of specific commodity feeds varies throughout the region. In many cases, feed storage and handling facilities and equipment may need to be modified to be able to utilize commodity-based feedstuffs in bulk. The long-term economics of investing in bulk feed storage and handling capabilities can be a wise move for many beef cattle operations.

Keep a close eye on pasture conditions, and continue supplemental feeding as needed until forages are plentiful. Lingering drought effects in much of the region make management of pastures and hay fields critical this year. Pay special attention to grazing management for adequate forage system recovery to take place this spring. Maintain at least a 4-inch (in.) average stubble height on winter annual pastures to avoid overgrazing. Stocker operators should be flexible in determining the number of head to purchase and then stock pastures according to current and projected available forage amounts.

Temporary, portable electric fencing is an excellent tool for implementing rotational grazing, limit-grazing, strip-grazing or creep-grazing systems. These management-intensive grazing (MiG) systems are essential for stretching forage supplies and associated expense outlays to improve profit margins.

Continue to watch for grass tetany. It is most likely to occur in lactating cows grazing lush pastures such as tall fescue or annual ryegrass. Feed a high-magnesium (Mg) (at least 10% magnesium) mineral supplement to cows and heifers on these high-quality pastures. Provide proper mineral supplementation and fresh water at all times.

Plant and fertilize pastures according to soil tests to ensure adequate forage supply for late spring and summer if not accomplished earlier this year. Using soil tests for fertilization program planning can help optimize fertilizer investments. Planning for incorporation of legumes such as white clover into forage systems is sensible for reducing nitrogen (N) fertilizer needs and improving forage quality. If renovation of existing toxic tall fescue fields to nontoxic endophyte-infected tall fescue is planned for next autumn, then chemically eradicate toxic tall fescue stands prior to seedhead development.

Hybrid Bermuda grass sprig supplies should be on hand for planting now. Contact custom spriggers to get on their planting schedules early. Hay harvesting season is around the corner. Finish repairs and general maintenance to forage-harvesting equipment. Plan storage for upcoming hay harvests.

Health management. Start watching for horn and face flies. Effective fly control programs need to be implemented soon as the fly population continues to build this time of year. Order fly control products, and begin a control program in a timely manner. Consider the type of fly control chemicals (organophosphate, organochloride or pyrethroid) used last year, and then rotate chemical classes.

Consider options for anaplasmosis control as biting insects become abundant. Internal parasite control practices are another component in a complete herd health program developed in consultation with a veterinarian. Practices consistent with Beef Quality Assurance (BQA) guidelines 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 Bang's (brucellosis) vaccination programs for heifers.

Many states offer disease monitoring and certification programs for beef cattle operations. Programs to monitor and eliminate Johne's disease and persistent infection (PI) with bovine viral diarrhea (BVD) are examples of animal health programs available in the region. Ask a local or state veterinarian about similar programs in your state.

Apply for a premises identification (ID) number for your farm or ranch from your state veterinarian's office if you have not already done so. This is a key component of disease and disaster preparedness for beef cattle operations throughout the entire region. Work to develop a ranch-level disease and disaster plan. Your local Extension educator and veterinarian can assist in these planning efforts.

Marketing and financial management. Remember, April 15 is the deadline for filing federal income tax returns. Detailed and organized ranch records make completing tax returns much easier. Visit with an Extension service office or tax professional for assistance addressing drought-related sales of livestock in tax returns this year.

Both small- and large-scale producers may benefit from forming alliances with neighbors for group marketing of cattle and bulk purchases of inputs. 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 management. Continue close monitoring of pregnant females yet to calve. Calving records should be well-organized now and include calving-ease scores and dam body condition at calving. Consider marketing late-calving females that do not fit the chosen calving season. Markets for beef females are often near seasonal highs this time of year.

Recent findings of the 2007 National Market Cow and Bull Quality Audit emphasize the need to view market cows and bulls as important revenue sources for the cattle operation and important food sources in the beef supply chain. The beef produced from market cows and bulls is an increasingly important food item in U.S. food retailer offerings and should be produced with proper management to minimize defects and good animal handling and transportation practices. Contact your state BQA coordinator for a copy of the new audit results.

Breeding management. Acquiring quality herd sires should be a top priority now if they are not already on the ranch. Demand bulls with performance information from reputable sources. Gather detailed information on bull genetics, health programs and customer service offerings on prospective herd sires. Use this information for making informed bull-selection decisions. Make sure that calving-ease sires are selected for breeding to heifers. Schedule breeding soundness exams (sometimes referred to as BSEs) in the near future so that any needed herd sire replacements can be obtained by the start of breeding season.

Vaccinate all open cows and heifers for vibriosis, leptospirosis and infectious bovine rhinotracheitis (IBR) at least 30 days before breeding. Place bulls with the herd in early April for mid-January calves. Start breeding heifers about a month before the cow herd. For pasture breeding, make sure that appropriate bull power is used: one yearling bull to 15 cows, one 2-year-old bull to 20 cows, one mature bull to 25-30 cows. Be ready to remove bulls from heifers after a 45- to 60-day breeding season. Observe breeding herds at least twice daily, early morning and late evening, to observe heat activity. Confining cattle to a limited grazing area makes this easier.

For artificial insemination (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 were turned in and out, identification of herd females and breeding groups, dates bred, returns to heat, and expected calving dates.

Nutritional management. Make sure the mature cow herd is in moderate to good condition [at least a body condition score (BCS) of 5 on a 9-point scale] to rebreed early. Supplement the forage program if cows are thin or spring pastures are coming on slowly. Place cattle with the highest nutritional needs (growing cattle, lactating first-calf heifers and cows) on the highest-quality grazing and hay. Make sure bulls are in good condition (target BCS of 6) in advance of spring breeding. Provide additional nutrients to thin or growing bulls. Monitor condition of bulls during the breeding season, and hand-feed if necessary.

Fall-calving herds

Breeding management. Maintain bulls in small pasture traps with effective fences, and manage bulls to start the next breeding season in good condition. Observe the cow herd for returns to standing heat. Schedule pregnancy checks for 45-60 days after the end of the breeding season or earlier if using ultrasound technology to determine pregnancy. Establish permanent ID (tattoos or brands) for bred heifers that will remain in the herd.

Calf management. Implement a calf preweaning vaccination program as recommended by a veterinarian, and make plans for boosters and preconditioning. This is a good time to castrate and dehorn late calves if not done previously. For calves born in an early fall season, consider whether early weaning in April fits operational goals. Make sure registered cattle are weaned within weaning age windows accepted by the American Angus Association. Fenceline weaning is a good option for reducing calf stress at weaning. Early-weaned calves should be placed on a high plane of nutrition, while their dams can be placed on lower-quality forages and feeds.

Feeder calf markets are often seasonally high this month, so 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. Breeders should share information on breed association-sponsored feeder-calf marketing programs with bull customers to help in marketing their calves.

Southern Great Plains

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

Spring-calving herds

1. Plan to implement estrus synchronization systems for heifers and cows. Some systems require initial management steps as early as 31 days in advance of the targeted initial breeding date. If not already done, purchase AI supplies, acquire semen, and check facilities and equipment. Don't forget to find and test the thawing bath before the first cow walks in the chute for breeding.

2. The anestrous period in cows calving at 2 years of age is about two to four weeks longer compared to mature cows. Therefore, many producers choose to initiate the breeding season for virgin heifers two to four weeks in advance of mature cows.

3. Research has demonstrated that bull exposure initiated within 30 days of calving reduces the anestrous period by one to two weeks in 2-year-old cows.

4. Plane of nutrition can have an effect on conception rates during the breeding season, and this effect seems to be more dramatic in

CONTINUED ON PAGE 134

CONTINUED FROM PAGE 133

2-year-old cows. In one study with 2-year-old cows, a high plane of nutrition (resulting in cow weight gain) during the breeding season resulted in a 76% first-service conception rate compared to a 58% first-service conception rate in cows that were provided a maintenance plane of nutrition. Providing 2-5 pounds (lb.) per head per day of an energy supplement may be necessary to achieve a high plane of nutrition in areas where abundant forage is not available until mid- to late-April.

5. If not previously done this year, consult your veterinarian about vaccinating cows a minimum of 30 days prior to breeding.

6. Conduct breeding soundness exams for all herd sires if not completed in March.

Fall-calving herds

Consult your veterinarian to plan the vaccination program for fall-born calves and to purchase the necessary supplies. An ideal situation is to vaccinate two to six weeks prior to weaning and again at weaning. If not done in March, implant steer calves and heifers not intended to be kept as replacements.

General recommendations

1. Introduced warm-season forages, such as Bermuda grass and Old World bluestem, should be fertilized in late April through mid-May. Approximately 50 lb. of nitrogen (N) is required to produce about 1 ton of forage. Efficiency of nitrogen use is improved if multiple applications (generally two or three) are made. More nitrogen is typically applied in the spring because moisture availability is consistently abundant.

2. High-magnesium mineral supplements should be provided for cattle grazing cool-season forages through the month of April.

3. A moderate- to low-phosphorus (P) mineral supplement (10% phosphorus or less) is recommended for most classes of cattle and forage types during the lush spring growing season. Most forage species contain adequate phosphorus, and some species contain excessive phosphorus during this period.

4. Plan a fly and tick control program. Check spraying equipment, dust bags and oilers, and purchase needed chemicals or tags for fly and tick control. Use insecticide-impregnated ear tags if ear ticks are a problem and there is no resistance in your area.

5. Establish new stands of lovegrass in April and May. Spray weeds in Bermuda grass and native grass pastures in late April or May.

6. Controlled burning programs can still be effective in early April in some areas to control weeds and brush. Controlled burning has also been shown to increase weaning performance of fall-born calves.

Western Region

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Spring-calving herds

The main focus is to prepare for the breeding season.

Genetic management

Sire selection. From a long-term standpoint, sire selection is the most important management decision that is made each year in a purebred cattle operation. Therefore, any time and effort devoted to this area is well-invested. The challenging and difficult aspect concerning sire selection is predicting industry cycles and trends. What kind of cattle are going to be the most sought after in three to five years? Carcass traits, dollar value indexes ($Values), and EPDs have been the driving forces in the industry during the last five years. However, with the high prices of corn and other commodities, we are now seeing an increased emphasis on fleshing ability and cow energy value ($EN). Breeders who are able to forecast or predict these trends will

always be in the driver's seat from a genetic standpoint.

In addition, I think it is most important that we use sires that are going to produce daughter progeny that we can build a herd around. Many times we use sires because we believe they will produce bull progeny that we can market from a phenotypic and genetic standpoint. That is fine; however, it is hard to justify the time and expense associated with AI if the daughter progeny are not the kind of females that will improve our cow herds.

Reproductive management

Semen. Get semen ordered early to avoid last-minute problems. Do not try to save money on semen — cheap semen is the most expensive item you can ever buy. If you can't afford to use the best bulls available, then just turn out bulls — they will probably do you more good in terms of herd improvement.

Synchronization protocol. If you are going to use estrus synchronization, now is the time to decide which protocol is going to work best in your production situation. Use a calendar and get all the important dates figured out far in advance. Work backwards from your desired first day of the breeding period. Avoid programs that require excessive amounts of animal handling and trips through the chute prior to breeding. These programs are expensive from both a labor and product standpoint. In addition, animals are stressed each time that cows and calves are gathered and sorted for processing.

We have given up on some older synchronization protocols that worked very effectively and were very cost-effective. In some operations, timed-AI systems are the only practical synchronization protocol. However, if heat detection is a practical option, then we will always experience higher conception and pregnancy rates with heat detection and AI vs. timed-AI systems.

Heat detection. Heat detection is often the most overlooked factor influencing the success of an AI or ET program. Heat detection is not just catching the cows in standing heat — anybody with a small amount of training can be effective in determining standing heat or estrus. Effective heat detection is achieved by developing the skills or ability to be able to pick up all the subtle signs of heat and being able to catch the cows that never do exhibit standing estrus.

AI equipment. Have extra AI supplies on hand and thoroughly clean and disinfect all breeding equipment (including the thaw thermos) prior to the start of the breeding period. Sanitation is one of the small details that is often overlooked. In addition, be sure to check the temperature of your thaw thermos prior to first use.

Semen and trichomoniasis test. Semen- and trichomoniasis-test bulls far in advance of the breeding season. If problems arise, replacement bulls can be located prior to the time they are needed for turnout.

Nutritional management

Mineral supplementation. Be sure that 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.

Protein and energy supplementation. Normally by late spring, forage resources are at their peak from both an energy and protein standpoint. Therefore, supplemental feeding is usually not needed at this time of the year.

Health management

Vaccinations. Make certain that cows and service sires are vaccinated at least 30 days prior to the start of the breeding period. At a minimum, cows should be vaccinated for the respiratory disease complex, the five serotypes of leptospirosis and the clostridial diseases. I would recommend that you use vaccinations that include fetal protection against PI BVD.

General management

Late spring is a good time to start spraying fencelines and to be certain that irrigation lines and ditches are in good repair prior to the start of the irrigation season if your operation includes irrigated pasture or hay fields.

Fall-calving herds

Cows and calves are on cruise control.

If fall-calving cows and calves are grazing native foothill rangeland, late spring is the time of the year that cattle require very little attention or management. Plans should be developed to administer preweaning vaccinations to bull and heifer calves two to three weeks prior to weaning.

Midwest Region

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Many producers should consider calving in April. Stress is minimized, and forage/grass management may be optimized.

►Keep calving areas as clean and dry as

CONTINUED ON PAGE 136

CONTINUED FROM PAGE 135

possible. Give each calf a dry, comfortable and clean environment.

- Supplement and feed cows to maintain or improve body condition prior to the breeding season (cows should be in moderate body condition by the start of the breeding season to maximize fertility).
- For thin, young cows, consider feeding fat to improve rebreeding rates. Research indicates that when feeding about 0.4 lb. per head per day of a plant source (soybean, sunflower, safflower oils), fat can increase first-service conception and pregnancy rates (0% to 15%). Feeding fat can be effective both before and after calving. Consult your nutritionist.
- Mineral supplementation should include greater levels of magnesium [intake should be between 15 and 30 grams (g) per head per day, or at least 11% of the mineral mix] for grass tetany prevention.
- Plan your breeding season, both AI and natural service. Make sure all supplies and semen are on hand prior to the breeding season. For natural-service programs, assign yearling bulls to 10-15 cows; 2- and 3-year-old bulls to 20-25 cows; and older bulls to 25-40 cows. Breeding for 65 days should be long enough; less than 90 days is a key sign of good management. Some suggest the service capacity of a yearling bull (less than 24 months) is equal to his age in months at turnout.
- Bulls should be in good body condition prior to the breeding season. Thin bulls can run out of stamina. Now is the time to make sure bulls are physically capable of performing for the upcoming summer breeding season.
- Breeding soundness examinations are recommended for all bulls.
- Consider using estrus synchronization

and AI. Several synchronization systems to overcome anestrus are available. Selection depends on labor, facility and implementation costs.

- Breed replacement heifers so they will calve when forage resources will allow them to grow, milk and return to estrus. Some producers will breed heifers three weeks prior to the mature cow herd to give them a greater chance to rebreed as 2-year-olds; others will match forage resources to reduce costs.
- Maintain top management concerning calf scours (sanitary conditions, early detection, electrolyte/dehydration therapy).
- Vaccinate calves as per veterinarian consultation. Castrate males that are not candidates for breeding stock prior to pasture turnout. Implant calves that will be sold at weaning and that will not be enrolled in a natural program.
- Wait to apply fly control until critical numbers are reached (100-200 horn flies per animal).
- Deworm cows and bulls if needed. Expect performance response to be variable, dependent on location, weather, grazing system, history, infestation level and management.
- Use prescribed burning techniques to eradicate Eastern Red Cedar trees and improve forage quality.
- Good fences make good neighbors. Summer pastures should have had fences checked, repaired or replaced by now.
- Check equipment (sprayers, dust bags, oilers and haying equipment) and repair or replace as needed. Have spare parts on hand; downtime can make a large difference in hay quality.