

# **Southeastern Region**

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

#### **General recommendations**

**Genetic management.** Many producers in the Southeastern Region are facing record input costs in their cattle operations. Improving profitability of beef cattle production necessitates both wise spending on inputs and good cattle marketing programs.

One input area that should not be sacrificed when deciding to cut costs is herd genetics. In particular, sire selection decisions affect the performance and marketability of multiple calf crops. Herd sires also affect cow herd genetics when raised replacement heifers are retained in the herd. Therefore, selecting lower-quality genetics may reduce expenditures slightly in the short term but

# 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
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
brucello	
	ovine spongiform encephalopathy
BVD	bovine viral diarrhea
Ca	calcium
EPD	expected progeny difference
FMD	foot-and-mouth disease
IBR	infectious bovine rhinotracheitis
ID	identification
in.	inch
lb.	pound
Mg	magnesium
MiG MLV	management-intensive grazing modified-live virus
N	
P	nitrogen phosphorus
P	persistent infection
Pla	parainfluenza-3 virus
-	
preg-check pregnancy-chec Se seleniu	
sq. ft.	square feet
TB	bovine tuberculosis
Zn	zinc
211	21110

will have more significant negative effects on herd productivity and revenues from cattle sales for many years to come.

An excellent resource on beef cattle genetics is the *Beef Sire Selection* manual published by the National Beef Cattle Evaluation Consortium (NBCEC). Visit *www.nbcec.org* for a copy of the manual and more information on beef cattle genetics. Also, make plans to attend the Beef Improvement Federation (BIF) annual convention June 30-July 3 in Calgary, Alta., Canada. Convention registration information is available at *www.beefimprovement.org*.

**Nutritional management.** 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 pasture and hay field management critical this year. Pay special attention to grazing management for adequate forage system recovery to take place this spring. Maintain at least a 4-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 stock pastures according to current and projected available forage amounts. Temporary, portable electric fencing is an excellent tool for implementing rotationalgrazing, limit-grazing, strip-grazing or creepgrazing systems. These MiG systems are essential for stretching forage supplies and associated expense outlays to improve profit margins.

Fertilize warm-season pastures such as Bermuda grass, Bahia grass or Dallis grass according to soil test recommendations. 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 fertilizer needs and improving forage quality.

Stay on top of weed control. Sprig hybrid Bermuda grass before moisture becomes limiting. Contact custom spriggers to get on their planting schedules early. Proceed with summer annual forage plantings. Graze sodseeded annual ryegrass pastures to prevent shading of warm-season forages.

Manage pastures to graze young growth and harvest excess for hay. Check hay

equipment to make sure it is ready for operation. 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

"Weaning performance reports should be used by both seedstock and commercial operations in determining which cattle to retain and which cattle to market." supplementation decisions.

Continue to watch for grass tetany. Grass tetany is most likely to occur in lactating cows grazing lush pastures such as tall fescue, orchard grass or annual rvegrass. Feed a high-magnesium (at least 10% magnesium) mineral supplement to cows and heifers on these highquality pastures.

Provide proper mineral supplementation and fresh water at all times.

**Health management.** Make sure adequate shade is available for cattle going into the summer months. Artificial shades should be constructed to be from 7-ft. high 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 flies may be out in force now. Effective fly control programs need to be implemented soon, as the fly population starts to build. 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. 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 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 plan. Local Extension agents and veterinarians can assist in these planning efforts.

**Marketing and financial management.** Small- and large-scale producers may both 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 cashflow 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 done for most herds. Continue close monitoring of pregnant females yet to calve. Calving records should be wellorganized now and include calving-ease scores and dam body condition at calving. Calf registration costs 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.

Complete management practices for late calves, and castrate and dehorn any calves missed at birth. Implant calves that will not be retained as breeding stock. Read implant product labels to determine when calves that were implanted at birth may be reimplanted.

**Breeding management.** Place bulls with herd in early May for mid-February calves. Start breeding heifers about a month before the cow herd. For pasture breeding make sure that appropriate bull power, or number of bulls, is used:

- ►one yearling bull to 15 cows;
- ► one 2-year-old bull to 20 cows; or
- ▶one mature bull to 25-30 cows.

Be ready to remove bulls from females after a 45- to 60-day breeding season.

Observe breeding herds at least twice daily, early morning and late evening, to observe heat activity and make sure cows are settling. Confining cattle to a limited-grazing area makes this easier.

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.** Make sure the mature cow herd is in moderate to good condition (at least a 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) at the start 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 preg-checks for 45-60 days after the end of the breeding season, or earlier if using ultrasound technology to determine pregnancy.

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.

Establish permanent ID (tattoos or brands) for bred heifers that will remain in the herd.

**Calf preconditioning and weaning.** 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. 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 that registered cattle are

weaned within weaning age windows accepted by the respective breed associations, within 120 to 280 days of age for the American Angus Association. Collect weaning performance data, including calf weaning weight and cow BCS. 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. Breeders should share information on breedassociation-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

- ► Vaccinate calves with seven-way clostridial bacterin, IBR and PI<sub>3</sub>. Consult your local veterinarian for specific recommendations. Replace missing animal ID tags in calves and cows.
- ► If recommended by your veterinarian, vaccinate heifer calves for brucellosis between 4 and 10 months of age.
- ► Consider weaning calves at 40-90 days of age if first-calf heifers are in BCS of less

"Look for and record cows that should be culled due to calf performance, feet, leg, eye, udder and attitude problems." than 5 and cows are in BCS of less than 4. This strategy will work to get thin cows and late-calving cows to cycle, although it is an "if all else fails" alternative due to the high level of labor and management required. Several universities have

fact sheets that provide management recommendations for early weaning.

- Late May to early June is a good time to deworm cows and bulls that are grazing cool-season forages, such as fescue and brome.
- ► Turn bulls out with cows after the AI program is completed. The bull-to-cow ratio will vary depending on the number of CONTINUED ON PAGE **116**

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cows or heifers serviced to AI and the age of the bull.

### **Fall-calving herds**

- Purebred breeders in the Southern Great Plains wean fall-born calves anywhere from April through July. An optimum, although not always practical, calf vaccination program includes vaccination of calves two to six weeks prior to weaning. This timing coincides with the month of May for many producers.
- ► Look for and record cows that should be culled due to calf performance, feet, leg, eye, udder and attitude problems. These records are often more practical to collect and record prior to the weaning date.
- At weaning, vaccinate calves according to your veterinarian's recommendations, weigh and condition score cows, and weigh calves.
- ► Transfer whole-herd records to your national breed association for processing.

#### **General recommendations**

- Continue or implement a fly and tick control program for all cattle.
- For pastures and rangelands that have been overgrazed due to drought conditions, consider reducing stocking rate 20%-40% to allow some recovery to occur. Some type of rotational grazing program that allows longer rest periods, if combined with reduced stocking rate, will also be beneficial to long-term pasture and rangeland productivity.
- Rotation-graze or hay weeping love grass at about 35-day intervals (rest four weeks, graze one week).
- Plant Sudan grass and Sudan hybrids for summer grazing or hay, fertilizing according to soil test.
- Nitrogen fertilizer use efficiency is improved when nitrogen applications are split into two or more applications approximately 30-45 days apart during the growing season. Late May or early June is a good time to plan the second application.
- ► There is no need to feed high-phosphorus mineral supplements during the lush forage growing period. In fact, the National Research Council (NRC) reduced the phosphorus requirement for beef cows in the latest version of its beef cattle publication. In most cases, mineral supplements containing 4%-10% phosphorus is adequate during this time of year.
- In this region, foot rot is a common problem through late May, June and early July. Limited research indicates that the addition of chlortetracycline to mineral

supplements can reduce the incidence of this problem. Adequate zinc supplementation is also important.

# **Midwest Region**

by **Twig Marston**, Kansas State University, tmarston@oznet.ksu.edu

Breeding season is beginning or continuing for many operations; therefore, both females and males must be reproductively fit.

determine the

synchronization

program to use,

following: age group

of females (yearling

replacement heifers

commitment of

heat detection;

females that are

postpartum, BCS,

calving difficulty);

labor availability;

and the return on

investment for total

commitment to the

breeding program.

anestrus (days

time and effort for

potential number of

consider the

vs. cows);

correct

1) Several estrus synchronization procedures have been developed. To

"Naturalservice bulls should have body condition, eyes, feet, legs and reproductive parts closely monitored during the breeding season. Resolve any problems immediately."

2) Handle semen properly and use correct AI techniques to maximize fertility.

3) Natural-service bulls should have body condition, eyes, feet, legs and reproductive parts closely monitored during the breeding season. Resolve any problems immediately.

4) All bulls should have passed a breeding soundness examination (sometimes referred to as a BSE) prior to turnout.

Begin your calf-preconditioning program. Vaccination, castration and parasite control at a young age will decrease stress at weaning time. This is the time to add value to the calf crop.

Implanting calves older than 60 days of age will increase weaning weight.

Properly identify all cows and calves. Establish premises numbers for compliance with state and national ID programs.

Use BMPs to establish sustainable grazing systems.

Use good management practices when planting annual forage sources and harvesting perennial forages.

Maintain records that will verify calving

season, health programs and management practices.

# Western Region

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

#### Fall-calving herds

The main focus is to prepare for weaning. Cows are on cruise control.

#### Reproductive management

**Preg-check.** Cows should be pregchecked at weaning time. Avoid holding over open cows even if they have been excellent producers since the problem will typically reoccur. In addition, open cows that are held over steal the profits from cows that are doing their job and weaning a calf. The old rule of thumb is that it takes the profits from four cows that are weaning calves to cover the losses associated with each open cow that is held over.

#### **Nutritional management**

Heifer and bull development. The developmental period from weaning until yearling time and beyond to the start of the breeding period is critical in terms of influencing the future productivity of both bulls and heifers. Both sexes need to be developed at adequate rates of gain so that differences in terms of genetic potential for growth can be exhibited. However, neither sex should be developed at extremely high rates as excessive fat deposition can hinder future reproductive performance and detrimentally affect foot and leg soundness.

Breeders have different opinions concerning development of beef bulls. Some believe that bulls should be developed at high rates of gain for short periods of time because this most closely resembles the production scenario that their steer progeny will be exposed to when placed in a feedyard. Others believe that both bulls and heifers should be developed on pasture with limited amounts of concentrates because this is the production scenario that females will be exposed to in most commercial cow herds.

No person would argue that heavy weaning and yearling weights are very impressive, and can be a major advantage when marketing bulls. However, from a long-term standpoint, cattle typically will hold their condition better and not fall apart when they are turned out — if they have been developed at slower rates of gain and on lower levels of concentrates. Therefore, it becomes a balancing act between what is best for the animal from a long-term standpoint and what is practical from a marketing standpoint. This year we may see more

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breeders developing cattle on lower levels of concentrates, not because it benefits the animals from a longevity standpoint, but rather because they will not be able to afford to pay the feed bills.

Feed costs have just about taken all of the profits out of developing and marketing bulls to commercial cattlemen. In our program here at the university, we have always developed all of our bull calves from weaning until yearling time to keep our contemporary groups complete and to collect yearling and ultrasound information on as many progeny as possible. From a selection standpoint, that management philosophy has merit. In addition, we needed to have our lower-end cattle for teaching purposes.

However, I believe that most breeders need to be extra critical this year in evaluating bull calves. If you have not been castrating lower-end calves — now is a good time to start. Be extra critical and castrate the average and below-average calves as early as possible. I realize that steer calves sold by the pound at weaning will not pay the bills in most purebred operations; however, there is more profit in a \$600 weaned calf than there is in a \$1,500 long yearling bull.

#### **Health management**

Weaned calves. Weaned calves should be treated to control internal and external parasites, and heifer calves should be brucellosis-vaccinated. Both bulls and heifers should be PI-BVD tested if that is part of your animal health management program. The first 30 days after weaning is the most critical period concerning BRD problems in cattle. If calves are exposed to dusty lots, run a sprinkler or water wagon. It will more than pay for itself.

**Pregnant cows.** If late-term abortions have been a problem in the past, consider booster vaccinations for the respiratory diseases and leptospirosis at preg-check time. Some producers may be only vaccinating at preg-check time; however, we prefer to vaccinate between calving and breeding and then revaccinate at preg-check for diseases that are a problem. Provided cows are vaccinated prior to breeding with the same product, a number of MLV vaccines are now approved for use in pregnant cows.

#### **Spring-calving herds**

The main focus is to prepare for the breeding season.

#### **Genetic management**

**Sire selection.** As I have mentioned previously in this column, sire selection is the most important management decision that we make each year in a purebred cattle operation. In the Angus breed, there are an unbelievable number of bulls available for use today.

In my opinion, the art of cattle breeding is something that is being lost as we lose more of our older breeders. Most breeders today use EPD sorts to identify and mate cattle.

"Sire selection is the most important management decision that we make each year in a purebred cattle operation." That method is really not cattle breeding — it is just mathematics. I am not implying that EPDs have no merit. They have been proven to be very effective in characterizing performance differences. However, I think EPDs are leading us astray in terms of

breeding better cattle. The models used to calculate EPDs are not flawed, but rather the emphasis that breeders have placed on certain EPDs has caused problems in terms of the cattle that have been produced as a result of those breeding decisions.

I believe that we have created and propagated cattle with some serious problems during the last 5- to 10-year period. How important is carcass merit if a bull has small testicles and can't pass a semen test? Or if a female has a bad udder and her calf cannot nurse without assistance? How important is disposition? I think it is the most economically important trait we have in beef cattle. Many of the convenience and production traits have been ignored or sacrificed for the sake of improving carcass merit or \$Values.

Very few cattle of today are the result of linebreeding, yet many of the great breeding animals of the past have been linebred individuals. I think many of us who are making breeding decisions today would be well-served if we studied some of the lessons of the past in terms of cattle breeding.

#### **Reproductive management**

**AI program.** Semen should be on hand and a synchronization protocol should have been selected. In addition, all AI equipment and facilities should be ready for use. As I have mentioned previously, don't overlook the importance of good heat detection.

### 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 the period from calving until conception is the most critical in terms of influencing reproductive performance.

#### **Health management**

**Vaccinations.** Cows should have been vaccinated at least 30 days prior to the start of the breeding period. If not already done so, calves should receive their first round of vaccinations for the respiratory disease complex and the clostridial diseases. In addition, many producers in our area have experienced good results by vaccinating calves for *Pasteurella haemolytica* and *P. multocida* at the same time. In addition, calves should receive booster vaccinations for a portion of the respiratory diseases from two weeks to one month after the initial round of vaccinations.

**Treatment protocol.** Treatment protocols and products should be on hand for scours and pneumonia in suckling calves. It is welladvised to have first and second treatment options for both conditions and to be sure that the protocols have been communicated to the appropriate personnel.

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