

#### **Guide to abbreviations and acronyms**

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

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\$Value	s dollar value indexes
ADG	average daily gain
Al	artificial insemination
AIMS	Angus Information
	Management Software
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
brucell	
BSE	bovine spongiform
202	encephalopathy
BVD	bovine viral diarrhea
Ca	calcium
CHAPS	Cow Herd Analysis and
	Performance System
DM	dry matter
EPD	expected progeny difference
ET	embryo transfer
FMD	foot-and-mouth disease
GnRH	gonadotropin-releasing hormone
IBR	infectious bovine rhinotracheitis
ID	identification
IM	intramuscular
in.	inch
lb.	pound
LCT	lower critical temperature
lepto	leptospirosis
Mg	magnesium
MiG	management-intensive grazing
MLV	modified-live virus
N	nitrogen
P	phosphorus
r Pl	persistent infection
PI PI <sub>3</sub>	
_	parainfluenza-3 virus
preg-check pregnancy-check	
Se	selenium
sq. ft.	square feet
	tandardized Performance Analysis
TB	bovine tuberculosis
TDN	total digestible nutrients
THI	temperature-humidity index
trich	trichomoniasis
Zn	zinc

# **Western Region**

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

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

The main focus is to prepare for the breeding season.

## **Genetic management**

**Sire selection.** Sire selection is one of the most important management decisions made each year in a purebred cattle operation. The challenging and difficult aspect concerning sire selection is predicting industry cycles and trends. What kind of cattle will be the most sought after in three to five years? Those 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 herd.

#### **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.

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. 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. (The newsroom at www.appliedreprostrategies.com provides a wealth of information on the various protocols.)

**Heat detection.** Heat detection is often the most overlooked factor influencing the success of AI programs. 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 females that never do exhibit standing

**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.

**Semen and trichomoniasis test.** Semen and trich-test bulls far in advance of the breeding season. If problems arise, replacement bulls can be located prior to turnout.

## **Nutritional management**

**Mineral supplementation.** Be sure females are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. 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 a protein standpoint. Therefore, supplemental feeding is not usually needed at this time of year.

#### **Health management**

**Vaccinations.** Make certain females and service sires are vaccinated at least 30 days prior to the start of the breeding period. I recommend 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

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

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

► Manage 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).

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- ➤ For thin, young cows, consider feeding systems that will increase energy intake to improve rebreeding rates. Consult your nutritionist.
- ➤ Mineral supplementation should include greater levels of magnesium [intake should be between 15 and 30 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. Review proper semen handling and AI breeding techniques to maximize your efforts. Use approved heat synchronization programs (check with semen suppliers, Extension faculty, herd consultants). 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. Some suggest the service capacity of a yearling bull (less than 24 months) is equal to his age in months at turnout. A natural breeding season from 60 to 90 days should be optimal.
- ▶ 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.
- Perform breeding soundness examinations on all bulls. Check for aftereffects of frostbite.
- ▶ Breed replacement heifers so they will calve when forage resources will allow them to grow, milk and return to estrus when 2 years old. 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 are not candidates for herd replacement when greater than 90 days of age unless they will 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.

# **Southern Great Plains**

by **David Lalman,** Oklahoma State University, david.lalman@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. This can be accomplished with a good fence or a surgically altered bull.
- **4.** 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.

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**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 with multiple applications (generally two or three).
- **2.** High-magnesium mineral supplements should be provided for cattle grazing coolseason 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.
- **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. New-generation ear tags are highly effective. Check with your veterinarian for tags that are working well 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. Be sure to read the herbicide label for the most effective rate and timing of application.
- **6.** Controlled burning programs can still be effective in early April in some areas to control weeds, brush and ticks. Controlled burning has also been shown to increase weaning performance of fall-born calves.

# **Southeastern Region**

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

### **General recommendations**

**Nutritional management.** Keep a close eye on pasture conditions. Continue supplemental feeding as needed until forages are plentiful. Maintain at least a 4-in. average stubble height on winter annual pastures to avoid overgrazing. Be flexible in determining the number of head to purchase. Stock pastures according to current and projected available forage. Portable electric fencing is an excellent tool for implementing rotational-, limit-, strip- or creep-grazing systems.

Continue to watch for grass tetany. It is most likely to occur in lactating cows grazing lush pastures. Feed a high-magnesium mineral supplement to these cattle. 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 done earlier. Incorporate legumes such as white clover into forage systems to reduce nitrogen fertilizer needs and improve forage quality.

Hybrid Bermuda grass sprig supplies should be on hand for planting now. Contact custom spriggers to get on their planting schedules early.

Finish repairs and general maintenance to forage harvesting equipment. Plan storage for upcoming hay harvests.

**Health management.** Start watching for horn and face flies. Consider the type of fly control chemicals used last year, and rotate chemical classes. Consider options for anaplasmosis prevention as biting insects become abundant. Plan internal parasite control practices. Include BQA-consistent practices in the health program.

Many states offer disease monitoring and certification programs for diseases such as Johne's disease and PI-BVD. Ask a veterinarian about programs in your state. Apply for a premises ID number for your ranch from your state veterinarian's office if you have not already done so. Work to develop a ranch-level disease and disaster plan.

**Marketing and financial management.** April 15 is the deadline for filing federal income tax returns. Detailed and organized ranch records make completing tax returns much easier.

Form an alliance with neighbors for group cattle marketing and bulk input purchases. Continue good production and financial recordkeeping.

# **Spring-calving herds**

**Calving management.** Closely monitor pregnant females yet to calve. Calving records should be well-organized now. 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.

**Breeding management.** Acquiring quality herd sires should be a top priority. Gather and use detailed information on bull genetics, health programs, and customer service offerings on prospective herd sires. Schedule breeding soundness exams so that any needed herd sire replacements can be obtained by the start of breeding season.

Implement the prebreeding vaccination program. Place bulls with the herd in early April for mid-January calves. For AI programs, obtain semen and other needed supplies and prepare facilities for breeding. Maintain good breeding records, including heat detection records, AI dates, dates bulls 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 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 forage. Make sure bulls are in good condition in advance of spring breeding. Provide additional nutrients to thin or growing bulls. Monitor condition of bulls during the breeding season.

## **Fall-calving herds**

**Breeding management.** 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 to 60 days after the end of the breeding season or earlier if using ultrasound. 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. Consider whether or not early weaning fits operational goals. Make sure that registered cattle are weaned within weaning age windows accepted by breed associations. Fenceline weaning is a good option for reducing calf stress at weaning. Early-weaned calves should be placed on a high plane of nutrition.

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

