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	osis Bang's disease
BSE	bovine spongiform
	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
Р	phosphorus
PI	persistent infection
Pl ₃	parainfluenza-3 virus
preg-ch	' ' '
Se	selenium
sq. ft.	square feet
	tandardized Performance Analysis
TB	bovine tuberculosis
TDN	total digestible nutrients
THI	temperature-humidity index
trich	trichomoniasis
Zn	zinc

Southern Great Plains

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

Spring-calving herds

- ➤ Maintain cows on fresh, clean pasture or in a dry, clean calving facility if they are confined. Consult your veterinarian in the event that calf scour problems develop.
- ► Check first-calf heifers several times daily for possible calving difficulties.
- ▶ Visit with your veterinarian to develop a written protocol before the calving season starts. This protocol should include what to do, when to do it, who to call (if someone besides your veterinarian is to be called), phone numbers, how to know when the veterinarian should be called, etc.
- ► The process of parturition (calving) is generally divided into three stages:

Stage 1 is the dilation of the cervix and occurs four hours to 24 hours before the actual birth.

Stage 2 is the delivery process and begins when the fetus enters the birth canal. The beginning of Stage 2 is usually identifiable when membranes or a water bag appears at the vulva. Published research indicates that Stage 2 averages about 30 minutes in mature cows and about one hour in first-calf heifers. Intervention should be considered (refer to your protocol) if there has been no progress in the birthing process after 30 minutes in mature cows or one hour in first-calf heifers.

Stage 3 includes expulsion of the placenta and involution of the uterus.

- Feed during evening hours to encourage daytime calving.
- ▶ During early lactation, energy and protein requirements increase dramatically. Assuming above-average genetic potential for milk production, these cows would require about 19 lb. of TDN and 3.4 lb. of protein. This is roughly equivalent to a diet containing about 59% TDN and 11% protein.

Fall-calving herds

▶ Fall-calving purebred cows with aboveaverage genetic potential for milk production should receive about 7 lb. of a supplement containing 20%-24% protein daily when the following conditions exist: Abundant dormant native range (3%-5% protein) is available and cows are at a BCS

- 5 or less and/or winter weather conditions are severe. A second alternative that works well under these conditions is to feed around 4 lb. of a protein supplement containing 20%-24% protein with 5 lb. of good-quality alfalfa hay.
- ▶ With moderate- to high-quality grass hay (minimum of 9% protein and 54% TDN) as the forage base, 5 lb. of a 12%-14% concentrate supplement will supply adequate protein and energy for 1,200-lb. purebred cows with above-average genetic potential for milk production.
- ► A high-calcium, high-magnesium mineral supplement should be provided to lactating cows grazing small-grains forage.
- ➤ Continue to monitor calves for the possible development of BRD.

General recommendations

- ➤ At the time of this writing, the risk of wildfire in Oklahoma is very high with dry conditions and abundant fuel. Be sure stored hay and buildings have a minimum fire guard/buffer of 50 ft.
- ➤ Fertilize fescue and small-grain pastures, depending on moisture, soil test and forage production needs.
- ➤ Sprig Bermuda grass during late February and March in a clean, firm seedbed.

Southeastern Region

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

General recommendations

Continue winter feeding to ensure good rebreeding and calf performance. Evaluate remainder of winter feed supply. Watch body condition, and match feeding groups to nutritional demands and feed and forage supplies. Graze winter annuals, maintaining at least 4 in. of stubble height to avoid overgrazing. Limit-grazing for a few hours per day is an effective winter grazing method.

Pull soil samples on summer pasture and hayfields to plan spring fertilization and liming. This is a good time to apply herbicide to dormant Bermuda grass. Plan to fertilize annual ryegrass and tall fescue before the flush of spring growth.

Keep proper free-choice minerals available for cattle at all times, continuing highmagnesium mineral supplement for cows on lush winter pastures to prevent grass tetany.

Maintain a complete herd health program

in consultation with a veterinarian. Include internal and external parasite control and vaccinations. Continue to look for lice infestations, treating as needed.

Plan to service hay equipment well before hay season.

Cow markets are typically favorable in the next few months compared to the rest of the year. Market cull cows in good body condition. Continue good production and financial recordkeeping. Gather records for tax purposes.

Spring-calving herds

Continue supplementation of pregnant females, targeting good condition at calving. Have calving supplies — including calving record books, ear tags, obstetric equipment, disinfectants, calf scales and colostrums — on hand. Check expected calving dates. Observe bred cattle closely as calving approaches, paying extra attention to heifers. Provide shelter for newborn calves during severe weather.

Separate lactating cows, first-calf heifers and dry cows into groups to feed more efficiently. Move pairs to clean pasture, and watch calves for scours. Consult with a veterinarian for advice on scours prevention and treatment. Tag, castrate, dehorn and implant calves as appropriate. Always maintain good calving records, including calf birth weights. Schedule prebreeding vaccinations, and order vaccines.

Take yearling measurements, reporting seedstock performance data to breed associations. Make heifer selection decisions based on genetics, dam performance information, temperament, soundness, breeding goals and progress to target breeding weights. Determine bull power needs, and make bull selection decisions for the upcoming breeding season.

Acquire quality herd sires with performance information from reputable sources. Schedule breeding soundness evaluations, and make certain bulls are in good condition and provided with exercise as the breeding season approaches. For AI programs, have ample semen and other supplies on hand and facilities prepared for breeding.

Fall-calving herds

Continue using the best hay (based on forage test results) and feeds for lactating cows. Monitor breeding activities in herds exposed for fall calving. If a high percentage of cows return to heat after 40 days of breeding, have bulls rechecked for breeding soundness, consult with a veterinarian on possible reproductive disease problems, and re-evaluate the nutritional program. Check on bull condition during the breeding

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season, and provide supplemental feed as needed. Prepare to remove bulls after a controlled breeding season. Keep bulls in small pasture traps with effective fences.

Western Region

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

Fall-calving herds

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. If a high percentage of females

are coming back into heat, switch sires if that is an option.

Nutritional management

Mineral supplementation. It is important that minerals are supplemented on a year-round basis. Supplements should be formulated to meet deficiencies specific to your region or area.

Protein and energy supplementation.

Most fall cows in the West graze native foothill pastures during the winter months. As is the case in any environment, timing and amount of rainfall are two of the critical factors that determine the pattern and amount of forage production. In most years in California, mid-February marks the start of the good forage production period in the foothills. Therefore, cattle should not need any supplemental energy or protein during this time of the year.

Health management

Treatments. This is the time period of the year when fall-calving cows and calves should have very few problems with animal health.

General management

Early spring is an excellent time of the year to work on general repairs such as repairing and building fences and other facilities. Also, if irrigated pastures comprise part of the pasture resources during the summer months, this is the time to make repairs to irrigation lines or ditches before they are needed later in the spring.

In addition, I would encourage producers to spend some time in the office working on setting long-term and short-term goals for their operations. Most producers spend the majority of their time providing the physical labor associated with the operation.

However, time spent with a blank piece of paper developing some strategies for how to improve an operation can be very beneficial. Development of a marketing plan is an excellent example of one of these activities. How many producers have ever developed a written marketing plan?

Spring-calving herds

The calving season is the main focus.

Genetic management

Sire selection. Although the start of the breeding season is still months away, now is the time to start finalizing a list of potential sires.

Reproductive management

Calving management. Females should have already started calving or should be shortly. Supplies should be on hand and

personnel should be properly trained or advised as to how to assist females with calving problems. In addition, any females that experience retained placentas should be treated promptly.

Nutritional management

Mineral supplementation. It is important that females receive adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. Many of the nutritional companies now have mineral supplements that are tailored to different times of the year and forage conditions.

Body condition. The target level of body condition at calving is a BCS of 5.0 (scale = 1 to 9) for mature cows and 6.0 for 2-year-old heifers. Although difficult to achieve, this level of body condition should be maintained during the breeding season.

Protein and energy supplementation.

The period from calving through the end of the breeding season is by far the most important period in terms of meeting protein and energy requirements of beef cows. If cows are going to maintain a yearly calving interval (which is the goal of most beef producers), then they must conceive by 80 days postpartum. This goal is extremely difficult to achieve if nutritional requirements are not being met.

The most practical way to monitor energy status (the relationship between energy consumed vs. energy requirements) is to evaluate body condition score. The most practical way to monitor level of protein intake is to evaluate an animal's fecal output. If the stool is loose and the cow pies flatten out on the ground, the animal is receiving an adequate level of protein intake. If the fecal

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output is extremely firm and the cow pies do not flatten out on the ground, then the animals are most likely protein-deficient.

Health Management

Treatment protocol. You should have treatment protocols and products on hand for both scours and pneumonia in suckling calves.

Midwest Region

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

- ▶ Monitor cow BCS. Once calving begins, body condition is tough to maintain and even more difficult to gain. Review nutritional management, diet ingredients and formulation. Balancing energy and protein will often maximize efficiency.
- Separate the cow herd into management groups. Examples would be: gestating, lactating, young, old, moderate to heavy condition and poor condition groups. Group feeding allows producers to better utilize available feed resources, improve herd health and produce a more consistent product.
- ► Minimize cold stress. Windbreaks greatly

- reduce maintenance energy demands. Hypothermia is a major cause of neonatal calf loss.
- ► If appropriate, vaccinate the cow herd for calf scours and other diseases. Consult your veterinarian. Three factors that improve herd health are high immunity, low stress and excellent sanitation practices.
- Consider using the Sandhills Calving System developed by the University of Nebraska. This system has been proven to essentially eliminate scours. (For details see http://vbms.unl.edu/extension/ sandhills%20scours%20paper%20smith.pdf.)
- ➤ Check calving heifers and cows regularly. Adhere to a herd-monitoring program. Give timely assistance when needed; call for help before problems have progressed beyond control.
- ➤ Feeding calving cows in the evening and at night will increase the percentage of calves born in daylight hours.
- ► Udder and teat scores should be recorded within 24 hours of calving.
- ► Birth dates, birth weights (with scales) and calving ease scores should be recorded.
- ► Source and age verification will be

- necessary for some marketing plans. Make sure you stay in compliance.
- ► Recordkeeping is a key to cow herd management. Analyzing data can greatly enhance decision-making.
- ➤ Control lice. Hair coat condition is important for insulation value. Sale cattle bulls and females that will be offered this coming spring need healthy-looking hair to demand top dollars.
- ► Collect and report weights, ultrasound and linear data on last year's calf crop if their age is appropriate. The future of beef production is in data collection and genetic information development.
- ► Attend beef industry educational and policy events. Be informed and proactive within the industry you work.

Responsibilities of providing breeding cattle to the industry have changed during the past century. Now, it is more than integrity and cattle breeding, it also includes providing genetic information and customer service. Principles of genetics, generating genetic information, and understanding and discovering genetic-environmental interactions are all seedstock cattle operation components.