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 ADG average daily gain ΑI artificial insemination AIMS **Angus Information** Management Software **BCS** body condition score BLV bovine leukemia virus **BMP** best management practices BOA beef quality assurance **BRD** bovine respiratory disease **BRSV** bovine respiratory synctial virus brucellosis Bang's disease **BSE** bovine spongiform encephalopathy **BVD** bovine viral diarrhea calcium Ca **CHAPS** Cow Herd Analysis and Performance System DM dry matter 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 LCT lower critical temperature lepto leptospirosis Mg magnesium MiG management-intensive grazing MLV modified-live virus nitrogen Ν Ρ phosphorus ΡI persistent infection PI₃ parainfluenza-3 virus preg-check pregnancy-check Se selenium square feet sq. ft. SPA Standardized 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, dlalman@okstate.edu

Spring-calving herds

- 1. A self-limited, high-protein creep-feeding program (such as the Oklahoma Silver program) enhances weight gain without causing calves to become excessively fleshy, because intake is limited to around 1 lb. of supplement per head per day. After about 30 days of creep consumption, a salt concentration of around 10% may be required to achieve this low level of intake.
- **2.** Evaluate body condition of young cows. Wean the calf in August or early September if the cow BCS is 4 or lower (on a 9-point scale; see *www.cowbcs.info* for more information on how to condition score your cows).
- **3.** Secure the appropriate products and supplies for the fall herd health program.
- 4. If the cow herd can be gathered during August or September, an effective strategy is to vaccinate calves two to six weeks prior to weaning and again at weaning. In fact, many value-added health programs recommend this protocol to maximize immune response in weaned calves.

Fall-calving herds

- 1. Yearling replacement heifers grazing native pastures may benefit from a small package (around 1 lb. per day) of high-protein supplement in order to ensure adequate growth and development prior to breeding in November.
- **2.** Calves that were first vaccinated at weaning require booster vaccinations within two to four weeks.
- 3. Calving season begins in mid- to late August for most fall-calving herds. Purchase calving supplies and prepare ID tags. The incidence of dystocia due to heavy birth weight is lower in fall-calving systems. However, producers should still be prepared to deal with occasional dystocia cases associated with abnormal presentations.

General recommendations

1. Information is power, and that applies to the hay crop. Expensive purchased feed costs result in more dramatic differences in value of low- vs. high-quality hay. For example, a year ago, the difference in value of 7%

protein, 49% TDN Bermuda grass hay and 12% protein, 55% TDN Bermuda grass hay was about \$25 per ton. The difference in value should be similar this year.

On one hand, this difference points out the magnified value of working hard to harvest high-quality hay. On the other hand, this difference suggests that being in the hay market, whether buying or selling, without the powerful information provided by a forage test is rather foolish. Nutrient analyses are inexpensive at \$15 to \$45 for most service packages. Most commercial laboratories can return results within about 72 hours. A list of certified commercial laboratories is available at www.foragetesting.org.

- 2. Continue a fly and tick control program 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.
- **3.** Harvest Sudan grass and Sudan hybrids for hay in the boot stage, which generally corresponds to a height of 3-4 ft. A routine nitrate test on forage before harvesting may be advisable, particularly if soil moisture has been scarce prior to harvest.
- 4. Consider managing a portion of Bermuda grass and fescue pasture for late-summer fertilization and fall grazing. Standing forage should be removed by haying or grazing during early August. Fifty pounds of nitrogen fertilizer should be applied during mid- to late August. Depending on rainfall, forage accumulation has ranged from about 20 lb. to 40 lb. of forage per pound of nitrogen fertilizer applied. Stockpiled forage can be grazed from October through December, and protein concentration is frequently between 10% and 15% of DM.
- **5.** Treat cattle for grubs after heel fly activity ceases and before larvae reach the back, generally between July 1 and Oct. 1.
- **6.** Early to mid-August is about the latest a person can spray sericea lespedeza and expect to achieve reasonable reductions in the plant population the following year.
- Identify other pasture weed and brush problems to aid in planning control methods needed next spring and summer.
- **8.** Adjust stocking rate and grazing system to control undesirable plants and forage accumulation for prescribed fire.

Southeastern Region

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

General recommendations

Plan winter grazing and feeding programs in advance. Stock pastures to current and projected available forage amounts. Implement rotational, limit-, strip-, or creepgrazing systems. Provide proper mineral supplementation and fresh water at all times.

Control summer weeds. Clip or harvest excess forage. Watch Dallis grass pastures for ergot contamination, clipping seedheads as needed. Avoid grazing heavily nitrogenfertilized warm-season annual pastures during drought or cool, cloudy weather to prevent nitrate poisoning.

Harvest forage for optimal forage maturity and quality. Use soil tests to optimize fertilizer investments. Record hay yields, forage test each cutting, and store hay to minimize losses. Determine if additional hay is needed. Maintain forage-harvesting equipment.

Heat stress can lower forage and feed intake, reduce growth performance, depress milk production, harm reproductive performance, and even cause death. Reduce cattle stress during hot weather. Work cattle early in the morning. Limit the time cattle spend in confined areas with limited air movement. Provide adequate shade for cattle (18 sq. ft. per head for 400-lb. calves and 25 sq. ft. per head for 800-lb. stockers).

Continue monitoring fly numbers. Remove ineffective fly tags, and implement additional fly control methods. Watch for pinkeye and anaplasmosis problems as biting insects remain abundant. Include internal parasite control and BQA-consistent practices in the health program. Ask a veterinarian about available state animal health programs. Develop a ranch-level disease and disaster preparedness plan.

Manage based on unit cost of production. Form alliances for group cattle marketing and bulk input purchases. Continue good production and financial recordkeeping. Use information from budgets and cash flow analyses to make knowledgeable production and marketing decisions.

Spring-calving herds

Acquire supplies for weaning ahead of time. Make sure fences where weaned calves will be placed are in good repair. Consider creep-feeding calves, depending on marketing plans and pasture conditions or to introduce them to feeds prior to weaning. Avoid weaning calves during extremely hot periods if possible, and arrange for calf comfort during these times. Vaccinate and booster for respiratory and other diseases

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Western Region

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

Fall-calving herds

The main focus is to prepare for the calving season.

Genetic management

Sire selection. The start of the breeding period is months away; however, now is the time to start developing a list of potential AI sires. For most successful purebred producers, sire evaluation is a continual process that never ends. In my opinion, it is the most important management decision that is made each year in a purebred or seedstock operation of any species.

Reproductive management

Vaccinations. If any precalving vaccinations, such as a scour vaccine, are going to be administered, they should be given far enough in advance of the calving season to avoid handling cows that are extremely close to parturition.

Calving supplies and equipment. Be sure that equipment is in working order and supplies are on hand to assist females once calving starts. In addition, if injections such as selenium are going to be administered at birth, be sure that an adequate supply of those products is on hand.

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 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.

Body condition. The target level of body condition at calving is a minimum BCS of 5.0 for mature cows and 6.0 for 2-year-old heifers on a scale of 1 to 9. Ideally, level of body condition should be maintained or improved during the breeding season.

Protein and energy supplementation. Both protein and energy requirements need to be met in order to achieve the desired level of body condition as described previously. If cows are grazing dry native forage, typically protein is more limiting than energy.

Be sure that you are pricing supplements on a cost per unit of protein or energy depending on which nutrient is most limiting in your situation. In situations where forage quality is limited but there is plenty of forage or pasture available, protein will be the more limiting nutrient. In situations where forage quantity is lacking, such as drought, then typically energy will be the more limiting nutrient.

Heifer development. The developmental period from weaning until breeding time is critical in terms of influencing the future productivity of females. Females should be developed to reach approximately 65% of their projected mature weight at the start of the breeding period.

Health management

Treatment protocol. Have treatment protocols and products on hand for both scours and pneumonia in suckling calves. It is well-advised to have first and second treatment options for both conditions.

Spring-calving herds

The main focus is that 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, and if a high percentage of females are coming back into heat, switch sires if that is an option.

Nutritional management

Mineral supplementation. As discussed in previous columns, it is important that minerals be supplemented on a year-round basis. Supplements should be formulated to meet deficiencies specific to your region or area.

Protein and energy supplementation. Most spring-calving cows in the West graze irrigated pastures. Typically cows grazing irrigated pastures are receiving adequate levels of both protein and energy and, therefore, supplementation is not needed.

General management

Castration of bull calves. As we have discussed in previous columns, castration of lower-end bull calves is a management option that needs to be considered to allow us to be able to deal with the high feed costs associated with developing bulls. Some producers are reluctant to do this because of the effect it has on contemporary groups and performance records.

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based on veterinary advice. Continue a high level of nutritional management for early-weaned calves.

Allow bulls to rest and regain condition, providing additional nutrients to thin or growing bulls. Market bulls that will not be used for future breeding. Preg-check females about 60 days after breeding season ends. After weaning, cull cows based on pregnancy status, soundness, health status, and performance records. Market cows

based on market conditions and cow body condition. Establish permanent ID for herd replacements. Make plans to market open heifers. Develop heifers to reach target breeding weights.

Fall-calving herds

Manage bulls to start the next breeding season in good condition. Evaluate herd sire options for the next breeding season. Monitor heifer weights and adjust nutrition to meet breeding targets. Prepare for the fall-calving season. Have cows in good condition for calving. Organize calving supplies. Move fall-calving females close to handling

facilities, and observe cattle frequently. Manage late gestation females in calving pastures with adequate shade.

Midwest Region

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

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

Breeding season

1. Look for unsound cows that need to be culled from the herd. Feet and legs, udders, eyes, disposition, and fleshing

- ability can be considered in some keep/cull programs.
- Identify cull prospects. Cull the cows that are "reproductively slow" from AI and/or natural service.
- **3.** Limit the breeding season. Remove bulls after 60 days with cows, 45 days with heifers. Length of natural service season can vary depending on whether estrus synchronization has been implemented.

These methods contribute to a more uniform calf crop, make winter feed management easier and increase the success rate of next year's breeding season.

Herd health

- **1.** If pinkeye is likely to be a problem, consider the following preventive and therapeutic measures:
 - ► Make sure the herd is receiving adequate vitamins and trace minerals in its diet.
 - ► Consider using a medicated tracemineral package.
 - Consult your veterinarian about developing a preventive health program that includes pinkeye control.
 - ► Control face flies.
 - ► Clip pastures with tall, coarse grasses that may irritate eyes.
 - ▶ Provide ample shade.

- ►Administer an IM injection of longacting oxytetracycline when symptoms are first noticed.
- Shut out irritating sunlight by patching eyes, providing shade, etc.
- ►Control flies.
- ► Always consult your veterinarian on the best treatments available.
- **2.** Develop a vaccination/health program for show cattle.
- **3.** Vaccinate suckling calves for IBR, BVD, PI₃, BRSV and possibly pasteurella at least three weeks prior to weaning.
- 4. Revaccinate all calves for blackleg.

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- **5.** Vaccinate replacement heifers for brucellosis at 4-10 months of age.
- 6. Monitor and treat foot rot.

Forage/pasture management

- **1.** Enhance grazing distribution with mineral feeder/supplement placement.
- **2.** Observe pasture weed problems to aid in planning control methods needed next spring.
- **3.** Monitor grazing conditions and rotate pastures if possible and practical.
- 4. If pastures will run out in late summer, get ready to provide emergency feeds. Start supplemental feeding before pastures are gone to extend grazing. Rotational grazing can be an effective forage management system and increase harvest efficiency of grazed lands.
- **5.** Harvest and store forages properly. Minimize waste while raking, baling and storing mechanically harvested feeds.
- **6.** Forage-test harvested forages for nitrate content and nutrient composition.
- **7.** Plan a winter nutritional program through pasture and forage management.
- **8.** For stocker cattle and replacement heifers, supplement maturing grasses with an acceptable degradable intake protein (DIP)/ionophore (feed additive)-type supplement.

General management

- Avoid unnecessary heat stress don't handle or truck cattle during the heat of the day.
- **2.** Repair, replace and improve facilities needed for fall and winter activities.
- **3.** Order supplies, vaccines, tags and other products needed at weaning time.
- 4. Consider weaning earlier than normal 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 from early weaning.
- **5.** Resist the temptation to feed cows without weaning; feeding early-weaned calves is more efficient than feeding lactating cows.
- **6.** Prepare to have your calf crop weighed and analyzed through your state, regional or breed performance-testing program.
- 7. Consider your marketing options.

 AngusSource® is an excellent program developed for Angus genetics. AngusSource is a U.S. Department of Agriculture (USDA) Process Verified Program (PVP) for Angus-sired calves that documents source, group age and a minimum of 50% Angus genetics.