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 intramuscular IM in. inch lb. pound **LCT** lower critical temperature lepto leptospirosis Mg magnesium MiG management-intensive grazing MLV modified-live virus Ν nitrogen phosphorus Ρ Ы persistent infection Pl_3 parainfluenza-3 virus preg-check pregnancy-check Se selenium square feet sq. ft. SPA Standardized Performance Analysis TB bovine tuberculosis TDN total digestible nutrients temperature-humidity index THI trich trichomoniasis Zn zinc

Southeastern Region

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

General recommendations

Nutritional management. Determine winter supplementation needs based on the forage situation. Evaluate cool-season pasture options and byproduct commodity alternatives. Monitor commodity prices, and purchase supplemental feed for winter as appropriate. Stock pastures according to current and projected available forage amounts. Implement rotational-, limit-, strip- or creep-grazing systems. Provide proper mineral supplementation and fresh water at all times.

Watch for fall armyworms in pastures and hayfields. Watch Dallis grass pastures for ergot contamination, clipping seedheads as needed. Ergot poisoning is most common in warm-season grasses in late-summer or early fall as seedheads reach maturity. Avoid grazing heavily nitrogen-fertilized summer annual pastures during drought or cool, cloudy weather to prevent nitrate poisoning.

Graze or clip pastures closely before overseeding winter annuals. Plant and fertilize cool-season forages. Potassium fertilization is important for Bermuda grass fields going into autumn and winter. Optimize fertilizer investments using soil tests. Apply lime as needed to make the most of fertilizer applications.

Harvest remaining hay cuttings. Record forage yields, forage-test each cutting, and store forages to minimize losses. Determine if additional stored forage is needed. Maintain forage-harvesting equipment.

Health management. Reduce cattle stress during hot weather. Work cattle early in the morning before the temperature rises. Limit the time cattle spend in confined areas with limited air movement. Supply confined cattle with access to fresh, cool water. Provide adequate shade for cattle.

Fly season continues in many areas of the region. Monitor fly numbers to determine if additional fly control measures are needed. Remove insecticidal fly tags as they become ineffective. Watch for pinkeye. Continue anaplasmosis control measures as biting insects remain abundant. Implement internal parasite control practices as part of a complete herd health program developed in consultation with a veterinarian. Include

BQA consistent practices in the health program.

Ask a veterinarian about available state animal health programs, including disease monitoring and certification programs.

Apply for a premises ID number. Develop a ranch-level disease and disaster preparedness plan.

Marketing and financial management.

Manage operations based on unit cost of production. Form alliances for group marketing and input purchases. Continue good production and financial recordkeeping. Many feeder-calf marketing programs are in full swing this time of year. Take advantage of programs such as AngusSource.

Spring-calving herds

Calf weaning, preconditioning and marketing. Determine vaccination, deworming, and implant needs. Acquire supplies ahead of fall cattle working. Repair working facilities and fences where needed. Wean calves based on market and pasture conditions and weaning age windows using weaning strategies that minimize calf stress. Avoid weaning calves during extremely hot periods. Arrange for calf comfort during these times.

Wean calves at least 45 days before shipment. Vaccinate for respiratory and other diseases based upon veterinary advice. Report weaning data to breed associations in a timely manner. Use weaning performance reports in cattle marketing decisions and to assess herd performance and nutritional status.

Implement calf preconditioning, marketing, or retained ownership plans considering seasonal price risks and breakevens on calves. Train calves to eat from a bunk and drink from a water trough. Continue a high level of nutritional management for early-weaned calves. Run breakevens on retained ownership options. Consider risk management strategies. Prepare for calf verification programs and special feeder-calf sales as appropriate. Assist bull customers with marketing their calves.

Herd nutrition management. Continue heifer development programs to reach target breeding weights, adjusting nutritional programs for declining forage quality.

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Provide additional nutrients to thin or growing bulls. Implement a nutritional program to get thin cows in proper body condition before next calving.

Fall-calving herds

Calving management. Complete any remaining preparations for calving. Purchase or assemble calving supplies, including calf ID tags and obstetric equipment. Move fall-calving heifers and cows close to handling facilities and observe cattle frequently. Separate the herd into calving and nutritional management groups. Manage late-gestation females in calving pastures with adequate shade. After calving, plan to move cow-calf pairs to clean pasture to minimize calf health risk.

Yearling management. Review yearling data collection age windows. Collect yearling performance data, including weights, hip heights, scrotal circumference measurements, and ultrasound body composition scans. Use

yearling performance reports to make further culls. Reserve higher-quality forages and feedstuffs for these growing cattle.

Breeding herd management. Schedule prebreeding vaccination needs. Manage bulls to start the next breeding season in good condition. Evaluate herd sire options for the next breeding season. Request information on upcoming bull sales. Check heifer weights, and adjust nutrition to meet breeding targets.

Southern Great Plains

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

Spring-calving herds

1. Consider weaning calves earlier than normal if cows are thin (BCS 4 or less) or if drought persists in your area. This strategy is particularly beneficial for 2- and 3-year-old cows and cows that are 10 years or older. Weaned calves can gain 1.5-2 lb. per day grazing good-quality pasture during late summer and early fall if a complementary supplement package is provided. In situations where good-quality pasture is not available, calves can be fed a

- growing ration in a drylot, generally resulting in very efficient feed conversion.
- 2. Make plans to complete the vaccination program that you and your veterinarian outlined for spring-born calves earlier in the year. Purchase the necessary supplies and prepare working facilities for processing and weaning.
- 3. Weaning is also an important time in the herd health program as it relates to the mature cows and replacement heifers. Potential management steps to be considered at this time include annual vaccinations, brucellosis vaccinations for replacements, pregnancy diagnosis, deworming and treatment for other parasites, retagging, culling decisions, and possibly freeze-branding replacements.

Fall-calving herds

- **1.** Calves should be individually identified and weighed within 24 hours of birth.
- **2.** Identify herd sires to be used in the AI program and purchase semen.
- 3. Plan the herd health program to be administered at "branding" time. Recent research published by Oklahoma State

Western Region

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

Fall-calving herds

The main focus is the calving season.

Genetic management

Operational goals. The next few years are going to be extremely challenging for the purebred cattle industry. It is paramount that breeders spend some time evaluating the goals of their operation from a genetic standpoint. Is the focus of your operation to raise bulls for the commercial cattle industry? Or is your focus to raise show heifers for your children or for other juniors?

Many people believe that similar sires should be used regardless of what type of operation is selected. I don't agree. In my opinion, today's purebred business is too competitive and your genetic selection has to be tailored to the goals of your operation.

Sire selection. I have talked about sire selection in every month's column because of its importance in a purebred cattle operation. Although the breeding season is still months away, now is the time to start developing a list of potential AI sires. Again, I will emphasize the importance of using sires that will produce females that will contribute to herd improvement. Because of record-high feed and fuel prices, we are seeing a move toward lower-maintenance genetics.

Reproductive management

Calving management. Supplies should be on hand and proper equipment should be available to assist females with problems at calving. Be sure that your personnel are properly trained in the most current procedures recommended for assisting females that are experiencing calving difficulties. As calves are tagged and weighed at birth, their naval stumps should be dipped or sprayed with a mild iodine or betadine product. In addition, if you are in a selenium-deficient area, they should receive a selenium injection at birth.

In order for maximal absorption of maternal antibodies, calves should nurse within the first six hours after birth. A supply of frozen colostrum should be on hand and should be replaced at the start of each calving season. The best source is a mature, heavy-milking

cow that calves early in the calving season. She should be milked out shortly after her own calf nurses. Do not freeze all the product in one bag; rather, divide it into the proper amount that would be fed to a newborn calf (about one-half of a calf bottle) prior to freezing. In addition, be certain that females are being monitored for the incidence of retained placenta. If problems arise, treat them promptly.

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 the 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 BCS of 5 (scale = 1 to 9) for mature cows and BCS 6 for 2-year-old heifers. Ideally, this level of body condition should be maintained during the breeding season. However, this is difficult to achieve, especially with cows that have extremely high levels of milk production.

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 in the previous paragraph. The challenge this year is going to be the price of supplements. Supplements should be compared on a price per unit of either protein or energy, depending on which nutrient is the most limiting in your situation. In general, if forage is available and is poor in terms of quality then protein will be the most limiting nutrient. If the availability of forage is the problem, then energy will be the most limiting nutrient.

Health management

Treatment protocol. Have treatment protocols and products on hand for both scours and pneumonia in suckling calves. If cows are calving on irrigated pastures, be prepared to have a higher incidence of scours in young calves. You are well-advised to have first- and

University (OSU) veterinary scientists indicates that, in properly immunized cow herds, an MLV combination vaccine given at branding, followed by revaccination at weaning is as effective a vaccination strategy as vaccine given preweaning (21 to 30 days), followed by revaccination at weaning.

General recommendations

- 1. Forage availability, water supply and forage quality conditions vary dramatically again this year across the Southern Great Plains region. Unlike last year, there will be a wide range in forage quality (including hay offered for sale). Managers should be equally prepared to deal with low-quality forage and (or) take advantage of high-quality forage available on the market. Sample and test forage. Forage testing and monitoring cow condition are the best tools to use in determining an appropriate nutrition program for fall and winter. A list of certified commercial laboratories is available at www.foragetesting.org.
- **2.** Concentration of critical minerals in forage declines as forage matures and as leaf-to-

- stem ratio declines from grazing pressure. Minerals that are of particular concern in the predominant forage species found in the Southern Great Plains include phosphorus, copper, zinc and selenium. A balanced supply of macrominerals and microminerals is an important component of the overall herd health program, influencing health of weaned calves, as well as reproductive success.
- 3. Late-summer applications of about 50 lb. per acre of nitrogen can produce high-quality Bermuda-grass or fescue pasture from October through December. Pastures should be grazed, hayed or otherwise mowed before the fertilizer application is made. Forage production will be highly dependent on late-summer precipitation.
- **4.** Prepare seedbeds for small-grain pastures and fertilize according to a soil test. Planting early (early September) ensures maximum forage production, whereas planting later enhances grain yield. If the producer intends to harvest wheat, plans should be made to remove cattle from wheat pastures at first-hollow-stem, which occurs around late February.

- **5.** Treat cattle for grubs after heel fly activity ceases, between July 1 and Oct. 1 (dates will differ by region), before larvae reach the back.
- **6.** Identify pasture weed problems to aid in planning control methods needed next spring. Adjust stocking rate and grazing system to control undesirable plants and forage accumulation for prescribed fire.

Midwest Region

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

September is when forages mature rapidly, weaning becomes appropriate and weather dictates several key management decisions.

Breeding season

Remove bulls after 60 days with cows or 45 days with heifers. Never use bulls for more than a 90-day breeding season.

Herd nutrition

- ► Provide ample amounts of clean, fresh drinking water.
- ► Consider limited-intake creep-feeding if: CONTINUED ON PAGE 82

second-treatment options for both conditions, and be sure the protocols have been communicated to the appropriate personnel.

Spring-calving herds

The main focus is to prepare for weaning.

Reproductive management

Pregnancy-check. Cows should be preg-checked at weaning time. Avoid holding over open cows, even if they have been excellent producers, as typically the problem will recur. In addition, open cows that are held over steal the profits from cows that are weaning calves. The 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

Supplementation. The comments concerning mineral supplementation for fall-calving cows would also apply to spring-calving cows. In terms of protein and energy supplementation, usually spring-calving cows can perform adequately without supplementation at this time of year as long as forage is available.

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. Our target levels of ADG between weaning and yearling in our program are 1.5 lb. per head per day for heifers and 3 lb. per head per day for bulls.

Because of the value of complete contemporary groups, many breeders have retained below-average bulls and heifers and developed them until yearling measurements were recorded before they were culled. With current feed costs, this practice is probably not economically feasible this year.

Health management

Weaned calves. Calves should be administered preweaning vaccinations for the respiratory disease complex at least two to three weeks prior to weaning. After weaning, they should be treated to control internal and external parasites and heifer calves should be Bang's-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 problems with BRD in cattle. If calves are exposed to dusty lots, run a sprinkler or water wagon — it will more than pay for itself. Consider pasture weaning if you have the facilities to accommodate this management technique. Minimal electric fencing can be used quite successfully, and I am confident that you will see major reductions in the incidence and severity of respiratory disease associated with weaning.

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

General management

Marketing program. Marketing ability is one of the key factors that determine economic performance in a purebred cattle operation. As times become more challenging, a sound and creative marketing program becomes even more important. Many people simply reduce the amount of advertising as times become more challenging. However, creative and well-placed advertising is now more important than ever.

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- drought conditions develop and persist;
- range conditions limit milk production;
- creep feed and/or grain prices are relatively low; or
- value of gain allows for economic benefits.
- ► Tips for successful limited-intake creepfeeding include:
 - limit duration to the last 30-75 days before weaning;
 - limit intake to less than 2 lb. per head per day;
 - use an ionophore or other feed additive to maximize efficiency;
 - keep protein levels equal to or greater than 16%; and
 - watch high salt levels; salt may help limit intake, but it can be tough on feeders.
- ▶ Prepurchase bulk-rate winter

supplementation prior to seasonal price increases.

Herd health

If pinkeye is likely to be a problem, consider the following measures.

Preventive:

- ► Make sure the herd is receiving adequate dietary vitamins and trace minerals.
- ► Consider using a medicated trace-mineral package.
- ► Consider vaccination for pinkeye and IBR.
- ► Control face flies.
- Clip pastures with tall, coarse grasses that may irritate eyes.
- ▶ Provide ample shade.

Therapeutic:

 Administer an IM injection of long-acting oxytetracycline when symptoms are first noticed.

- Shut out irritating sunlight by patching eyes, providing shade, etc.
- ► Control flies.
- ► Consult your veterinarian.
- ► Consider revaccinating any show animals for respiratory diseases.
- ► Vaccinate suckling calves for IBR, BVD, PI₃, BRSV and possibly pasteurella at least three weeks prior to weaning.
- ▶ Revaccinate all calves for blackleg.
- ► Vaccinate replacement heifers for brucellosis at 4 to 10 months of age.
- ► Monitor and treat foot rot.

Forage/pasture management

- ► Enhance grazing distribution by placing the mineral mixture away from water sources.
 - Observe pasture weed problems to aid in planning control methods for next spring.

- Monitor grazing conditions and rotate pastures if possible and/or practical.
- If pastures will run out in late summer, get ready to provide emergency feeds.
 Start supplemental feeding to extend grazing before pastures are gone.
- Harvest and store forages properly.
 Minimize waste by reducing spoilage.
- Collect samples of harvested forages and have them analyzed for nitrate and nutrient composition.
- Plan winter nutrition program through pasture and forage management.
- For stocker cattle and replacement heifers, supplement maturing grasses with an acceptable degradable intake protein/ionophore (feed additive) supplement.

Reproductive management

▶ Remove bulls to consolidate calving season.

- ▶ Preg-check and age pregnancies 60 days after the end of the breeding season.
- ► Consider culling cows that are short-bred.

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

General management

- Avoid unnecessary heat stress. Don't handle and/or truck cattle during the heat of the day.
- ► Repair, replace and improve facilities needed for fall processing.
- Order supplies, vaccines, tags and other products needed at weaning time.
- ► Consider early weaning if:
 - drought conditions develop and persist;
 - range conditions limit milk production;
 - cows are losing body condition;

- calf and cull cow prices indicate maximum profit; or
- facilities and management are available to handle lightweight calves.
- ► Remember, first-calf heifers have the most to gain from early weaning.
- ▶ Resist the temptation to feed cows without weaning; feeding early-weaned calves is more efficient.
- ► Look for unsound cows that need to be culled from the herd.
- ▶ Prepare to have your calf crop weighed and analyzed through your state, regional or breed performance-testing program.
- ► Document cost of production by participating in Standardized Performance Analysis (SPA) programs.
- ▶ Plan your marketing program, including private-treaty sales, consignment sales, test stations, production sales, etc.