

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
AI	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
brucello	sis 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
Ν	nitrogen
Р	phosphorus
PI	persistent infection
PI3	parainfluenza-3 virus
preg-che	eck pregnancy-check
Se	selenium
sq. ft.	square feet
SPA Sta	andardized Performance Analysis
IB	bovine tuberculosis
IDN	total digestible nutrients
ſĦI	temperature-humidity index
trich	trichomoniasis
Zn	zinc

Western Region

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

Fall-calving herds

The main focus is to prepare for the breeding season.

Genetic management

Devote adequate time to sire selection because, from a long-term standpoint, it is the most important management decision that is made each year in a purebred cattle operation.

Reproductive management

Order semen early to avoid any lastminute problems.

Evaluate available synchronization protocols and determine the best choice in your production situation.

Heat detection is often the most overlooked factor influencing the success of an AI or ET program.

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 trich-test bulls far enough in advance of the breeding season that if problems arise, replacement bulls can be located prior to the time they are needed for natural service.

Nutritional management

Ensure cattle are receiving adequate levels of calcium, phosphorus and trace minerals deficient in your area.

If cows are grazing dry native forage, fall is when protein supplementation is most important. Price supplements on a cost per unit of protein.

Energy balance is the relationship between the amount of energy that is consumed vs. the amount that is used for various physiological functions such as maintenance, lactation and reproduction. It has a major effect on fertility. It is critical that cows be in a state of positive energy balance, or gaining weight, during the breeding season.

Health management

Make certain females are vaccinated at least 30 days prior to the start of the breeding period. Have treatment protocols on hand for scours and pneumonia in suckling calves. Have first and second treatment options for both conditions.

Spring-calving herds

The main focus is to keep weaned calves healthy. Cows are on cruise control.

Reproductive management

Preg-check cows if not already done. Avoid holding over open cows even if they have been excellent producers as typically the problem will recur.

Nutritional management

The comments concerning mineral and protein supplementation for fall-calving cows also apply to spring-calving cows at this time of the year.

Monitor body condition of cows; however, the period from weaning until 50 days prior to the next calving is the least important from a nutritional standpoint. It is fine for cows to slip in body condition provided condition is redeposited before the start of the next calving period.

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.

Health management

Weaned calves should be treated to control any internal or external parasites. Heifer calves should be Bang's-vaccinated if not already done so, and both bulls and heifers should be PI-BVD-tested if that is part of your animal health management program.

If late-term abortions have been a problem in the past, consider booster vaccinations for the respiratory diseases and lepto at pregcheck.

Southeastern Region

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

General recommendations

Modify winter supplementation needs based on forage availability and quality. Watch body condition, and group cattle into winter-feeding groups. Provide proper mineral supplementation and fresh water at all times. Maintain feeding equipment.

Supplementation may be needed on residual summer grazing. Offer hay before forage availability becomes limiting. Implement MiG systems. Examine annual ryegrass for blast, particularly after warm, humid conditions.

Watch for lice, and treat cattle as needed. Remove any remaining insecticidal ear tags. Follow up on internal parasite control practices. Implement a complete herd health program developed in consultation with a veterinarian, including BQA-consistent practices.

This is the last month of hurricane season for the region. Stay vigilant. Develop a disease and disaster preparedness plan.

Manage operations based on unit cost of production. Form alliances for marketing and input purchases. Continue good production and financial recordkeeping. Make any final plans for ranch expenditures and marketings during this tax year.

Spring-calving herds

Check weaned calves regularly for health problems, and make sure the nutritional program is providing adequate gains. Culling should be finished this month. Implement calf preconditioning, marketing, or retained ownership plans considering breakevens and risk management strategies. Prepare for special sales as appropriate. Help bull customers market their calves. This time of year is often ideal for marketing cows and bulls.

Calving may begin in December in some herds. Order calving supplies. Check bred heifers frequently.

Allow bulls to rest and regain condition. Provide additional nutrients to thin or growing bulls. Market bulls that will not be used in future breeding seasons. Start identifying needs for herd sire replacements, and consider purchasing bulls at upcoming sales.

Replacement heifers likely need to grow at a rate of 1 lb.-1.5 lb. per day to meet target breeding weights. Separate bred heifers from the cows, and provide adequate nutrition. Monitor body condition closely, and supplement thin cattle. Feed lower-quality forages to dry, pregnant cows, saving the best forages for calving season.

Midwest Region

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

Herd management for spring-calving cows

- 1. Preg-check if not already completed.
- 2. Consider feeding cull cows to increase body weight and value. Minimize cost of gain. Use of biotechnology has shown dramatic effects on rate of gain, cost of gain, and carcass composition. Young cows seem to have greater average daily gains and feed efficiency than older cows.
- 3. Score cows for body condition. Provide thin cows (BCS 3 and 4) extra feed now. Take advantage of weather, stage of pregnancy, lower nutrient requirements and quality feedstuffs.
- 4. In late fall and early winter, start feeding supplements to mature cows grazing dry grass using these guidelines:
 - (a) 1-2 lb. per day of a 40% CP supplement;
 - (b) 3-4 lb. per day of a 20% CP supplement; or
 - (c) 10 lb. good nonlegume hay, no supplement needed.
- 5. Compare supplements on the basis of cost per pound of nutrient.
- 6. Utilize crop residues. Graze efficiently. Cows with average body condition can be grazed at 1-2 acres per cow for 30 days, assuming normal weather. Available forage is directly related to grain production levels. Protein, phosphorus and vitamin A are usually the limiting nutrients.
- 7. Discontinue feeding tetracycline if used for anaplasmosis control.

Calf management

- 1. Submit data to Breed improvement Records, AHIR/BRS programs, and/or other ranch record systems.
- 2. Finalize plans to merchandise calves or to background through yearling or finishing programs.
- 3. Use AIMS to record calf data.

Forage/pasture management

Plan a winter nutritional program through pasture and forage management.

Fall-calving herds

Fall calving is wrapping up for many herds. Tag, castrate, dehorn and implant calves as appropriate. Keep good calving records. Continue frequent observation of late gestation fall-calvers. Manage them in calving pastures near cattle handling facilities. After calving, move cow-calf pairs to clean pasture to minimize calf health risk. Restock calving supplies, including calf identification tags as needed.

Cow nutrient needs increase dramatically after calving. Provide good nutrition for lactating cattle approaching breeding. Start feeding a high-magnesium mineral supplement about 30 days before lactating cattle are turned out onto lush winter pastures.

Cattle may be nearing the end of yearling data collection age windows. Collect and report yearling data. Reserve higher-quality feedstuffs for growing cattle, such as yearlings.

Schedule prebreeding vaccinations. Check heifer weights, and adjust nutrition to meet breeding targets. Breeding begins this and next month for most herds. Finalize herd sire plans for the rapidly approaching breeding season. Arrange breeding soundness exams. Order breeding supplies.

Southern Great Plains

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

Spring-calving herds

- Wean calves as soon as possible, if not already done. Cow milk production is at its lowest point in the lactation curve, and forage quality rapidly declines through the fall months. As a result, adjusted weaning weights generally decline for calves that are weaned late in the season. Furthermore, under most circumstances, cows will continue to lose condition until the energy demand for milk production is removed.
- 2. For cows grazing forage that contains less than 7% protein, begin supplementing the equivalent of about 0.4 lb. of protein per day. This is approximately equivalent to feeding 1 lb. of a 38% protein product or 2 lb. of a 20% protein product. This strategy will increase forage intake and digestibility, allowing the cattle to harvest 25%-50% more energy from the forage resource. As a result of this tremendous response, cows should gain one-half to one full BCS before the end of the year, assuming they have access to abundant forage.
- **3.** Depending on forage quality, retained heifer calves will likely require

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supplementation in order to achieve gains of 1-1.5 lb. per day. The most appropriate and efficient supplementation program can only be designed with the nutritional characteristics of the forage resource in mind. For example, high-quality forage, such as wheat pasture, will not require protein or energy supplementation. In contrast, high-quality prairie hay may require up to 1.5% of body weight of supplemental feed to achieve the desired level of gain.

4. There is much interest in feeding fat to beef cattle (generally through supplements) to increase weight gain and achieve improved reproductive performance. Published experiments have failed to document consistent positive responses to fat supplementation in general. However, the research is more consistent in demonstrating that too much ruminally active fat can hinder intake, forage digestion and weight gain in general. Under most circumstances, forage-fed cattle should receive diets that contain no more than 4%-5% total fat. Many forages contain 1%-2% fat, leaving

room for a maximum of 2%-4% supplemental fat.

Fall-calving herds

- **1.** Lactating, fall-calving cows should receive approximately twice the amount of supplemental protein as the spring-calving cow herd. On native, warm-season pasture, we use an escalating supplementation program, beginning with 1 lb. of 37%-40% CP supplement in October and increasing to 3-4 lb. by Jan. 1.
- **2.** If not done in October, brand calves and vaccinate for clostridial diseases. Vaccinate cows for reproductive diseases according to your herd health plan.
- **3.** Prepare for the breeding season by purchasing semen, checking, repairing and cleaning breeding equipment and facilities. An excellent resource for up-todate information on various heat synchronization schemes is available in the following fact sheet: ANSI-3166 "Synchronizing Heats in Beef Cows and Heifers." It can be accessed at *http:// pods.dasnr.okstate.edu/docushare/dsweb/ HomePage.*

General recommendations

- 1. Most of this region has been fortunate to have an excellent forage production year. Hay quality is excellent (in general) as well as abundant. Remember that any lowquality hay (like last year's crop) should be fed during times when the animal's nutrient requirements are low, such as the dry period during mid-gestation in a spring-calving cow herd.
- **2.** Discontinue feeding tetracycline for anaplasmosis control after the end of the vector season (30-50 days after a hard freeze).
- **3.** Check with your Extension office for information on educational meetings about livestock and forage production practices.
- **4.** Lightly graze native hay meadows after frost. Remove cattle from meadows in wet conditions.
- **5.** Use prescribed fire every other year in dry leaf litter to control hardwood sprouts (less than 4 in.). Fire will also reduce winter tick infestations.

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