



# Angus Advisor

► NOVEMBER herd management tips

## 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 syncytial virus
brucellosis	Bang’s disease
BSE	bovine spongiform encephalopathy
BVD	bovine viral diarrhea
Ca	calcium
CHAPS	Cow Herd Analysis and Performance System
CP	crude protein
cwt.	hundredweight
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
PI	persistent infection
PI <sub>3</sub>	parainfluenza-3 virus
preg-check	pregnancy-check
Se	selenium
sq. ft.	square feet
SPA	Standardized Performance Analysis
TB	bovine tuberculosis
TDN	total digestible nutrients
THI	temperature-humidity index
trich	trichomoniasis
Zn	zinc

## Western Region

by **Randy Perry**, California State University, Fresno, [randyp@csufresno.edu](mailto: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 last-minute 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 you have 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 preg-check.

## Midwest Region

by **Twig Marston**, University of Nebraska, [tmarston2@unl.edu](mailto:tmarston2@unl.edu)

### Herd management for spring-calving cows

1. Update and continue developing a winter and spring cow herd management plan. With the widespread drought conditions,

alternative management solutions will need to be considered. Expect the unexpected. Be flexible. Make a plan and work the plan.

2. Preg-check if not already completed. Cull open cows.
3. Consider feeding cull cows to increase body weight and value. Minimize cost of gain. Biotechnology (implants, deworming, feed additives, partitioning agents, etc.) has shown dramatic effects on rate of gain, cost of gain and carcass composition. Young cows should have greater ADG and feed efficiency than older cows.
4. Use body condition score to sort mature cows. Provide thin cows (BCS 3 and 4) extra feed and deworm now. Take advantage of weather, stage of pregnancy, stages of lower nutrient requirements and feedstuff availability.
5. In late fall and early winter, normal supplementation programs to mature cows grazing dry grass follow 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.
6. Compare supplement on the basis of cost per pound of nutrient.
7. 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 and stockpiles of crop residue. Available forage is directly related to grain production levels. Protein, phosphorus and vitamin A are usually the limiting nutrients.
8. 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.
4. Select herd replacements and develop properly.
5. Develop a business plan to merchandise remaining calf crop.

## **Southern Great Plains**

by **David Lalman**, Oklahoma State University,  
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### **Spring-calving herds**

1. Wean calves as soon as possible, if not already done. Cow milk production is at its lowest point in the lactation curve, and

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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. 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 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 will require protein and energy supplementation to achieve weight gain beyond 0.75 lb. per day.

**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, 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-to-date 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. Producers have baled or purchased a lot of low-quality roughage this year just trying to find something to get cows through the fall and winter. Remember that any low-quality or year-old hay should be fed during times when the animal's nutrient requirements are low. For example, the dry period during mid-gestation in a spring-calving cow herd is likely the best time to utilize this low-quality feed, along with an appropriate supplement. Cowculator is a great tool to help determine supplementation needs and cost. This simple software program is available at [www.beefextension.com](http://www.beefextension.com).
2. Discontinue feeding tetracycline for anaplasmosis control after the end of the vector season (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. Only about 25% to 40% of the existing regrowth should be grazed.

our winter-feeding program. As we've seen corn reach record highs during the past months, in addition to the drought parts of the country are still facing, these winter-feeding programs may cost significantly more than expected. Some may have booked feeds back in the early summer when prices were lower; however, many are scratching their heads now as the feed bill is soaring through the roof.

Nutrition represents the largest input cost associated with cattle production, accounting for as much as 70% of the annual carrying cost of a brood cow. Now would be an excellent time to re-evaluate our nutrition program to come up with economical, not cheap, solutions to get through the winter. Many producers could improve efficiency in their feed programs by understanding what nutrients they have available in their forages and managing those nutrients to be allocated properly according to the changing needs of the herd. As with previous columns, we'll look at this in two parts. The first will focus on cattle; the next will focus on the actual nutritional program.

**Understand your production system.**

The first thing to ask is, "Do we really understand the nutrient requirements of our brood cows and how that changes throughout a 365-day year?" Our goal as cattle producers is to have a calf per cow every 365 days. A common figure used is annual carrying cost of a brood cow. The difference in this figure and the price received for her calf is essentially the profit or loss for

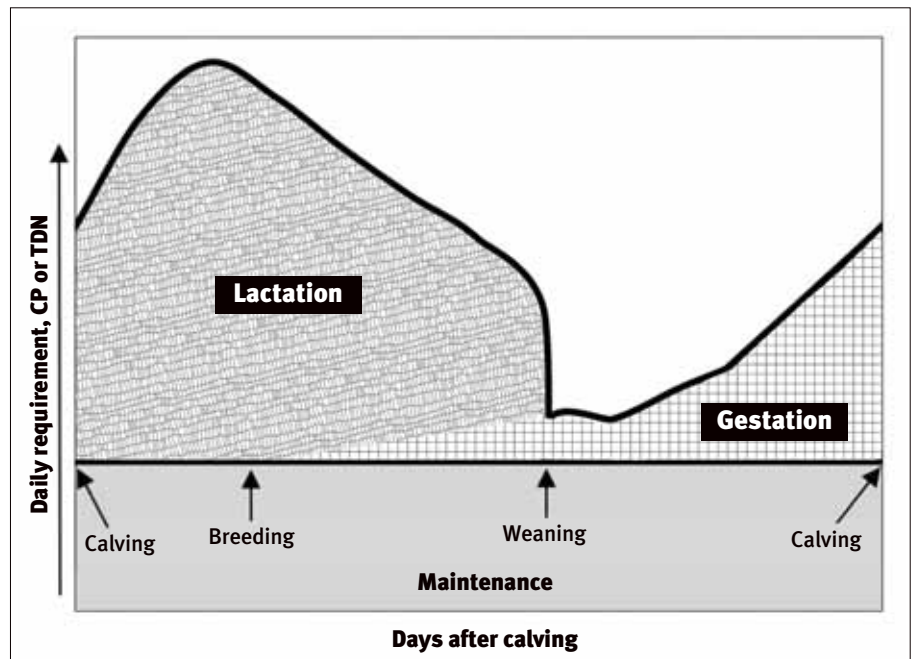
**Southeastern Region**

by *Lawton Stewart, University of Georgia, lawtons@uga.edu*

**Evaluating your herd nutritional program**

As we're getting ready for winter months, most of us are getting ready to implement

**Fig. 1: Daily CP and TDN requirement throughout a 365-day calving interval**



that cow. If the calving interval extends past 365 days, that means less income to cover the cow's carrying cost, and then we start to lose money quickly.

In order to keep on this interval, a cow has approximately 80 days to rebreed after calving. The ability to do this is highly dependent on nutrition. To put this into perspective, a brood cow will prioritize her nutrients in the following order: 1) maintenance 2) growth (heifers) 3) lactation 4) reproduction (cycling). What this means is

the producer's No. 1 priority (a calf every 365 days) is the cow's No. 4 priority (reproduction).

To further complicate the situation, this breeding season comes during the peak of her energy and protein demands due to lactation (Fig. 1). Also, Fig. 1 illustrates the large fluctuation in nutrient needs of a cow from calving in one year to weaning, to calving the following year. If a herd does not have a controlled breeding season or is not separated by production stage, it becomes

quite difficult to manage nutrient needs. However, if these changing nutrient demands are understood, a nutritional program can be tailored to meet these needs.

Once we can visualize and understand the changing nutrient requirements of our brood cows, we can then start tailoring our nutritional program to the herd. Next month, we'll focus on understanding the nutrients we have available in our forages and supplements and how to minimize the cost associated with them. 