



Angus Advisor

► DECEMBER 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 ₃	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

Midwest Region

by **Eric Bailey**, University of Missouri, baileyeric@missouri.edu.

General comments

Merry Christmas to all the readers out there. Thanks for all you do to be good stewards of the land and of your herds. My largest piece of advice is to give your accountant a call and evaluate opportunities to save on taxes before the end of the year. If you are in the market for supplements, protein and energy are the two nutrients likely to be deficient in most beef operations this time of year.

One effective strategy to reduce supplement costs is to price them per pound of nutrient required. For example: Compare Feed A, a 20%-CP feed costing \$200 per ton, to Feed B, a 40%-CP feed costing \$350 per ton, understanding you need to feed 1 lb. of CP per cow per day.

You will need to feed 5 lb. of the 20% CP feed or 2.5 lb. of 40% CP feed to provide 1 lb. of CP. Feed A costs 10¢ per pound and feed B costs 17.5¢ per pound, yet when priced per pound of crude protein, Feed A costs 50¢ per lb. of CP and Feed B costs 44¢ per lb. of CP. If you feed a cow for 90 days, Feed B will save \$5.40 per cow, assuming that equipment and labor availability is similar.

Feed companies make a profit selling convenience. Producers selling commodity beef (non-value-added) with modest profit margins need to reduce use of purchased and raised feeds to improve chances to be profitable.

Management calendar for December

Assumptions: Spring-calving herd begins to calve Feb. 1; fall-calving herd begins to calve Sept. 1.

Spring-calving herds

- Calves are weaned and cows are ~90 days from the beginning of calving.
- Cows on warm-season forages or crop residues are likely deficient in protein. Supplement with a protein source that fits your equipment and labor availability. Remember that protein supplements do not need to be fed daily to be effective.
- Assuming forage quantity is not

lacking, forage quality will be sufficient to maintain body condition.

- Have a plan for severe weather conditions.

Fall-calving herds

- Breeding season is under way. Monitor your bulls and ensure no injuries or issues that might preclude them from breeding.
- Monitor the availability and quality of forages being grazed.
- Plan your supplemental feeding program with a goal of minimizing the use of purchased and raised feeds, as they are often in excess of three times the price of grazed forage.
- Cows need to be in moderate condition (BCS = 5) at the beginning of the breeding season. Consider separating thin cows and feeding them separately.
- Have a plan for severe weather conditions.

Southern Great Plains

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

Spring-calving herds

- Be prepared to adjust the nutritional program as necessary to keep cows from losing weight and body condition ahead of late-winter/spring calving.
- The goal should be to have mature cows in a minimum BCS of 5 and first-calf heifers in a minimum BCS of 6 by the time they calve.
- Nutritional management adjustments might include moving cows to ungrazed stockpiled pasture, increasing concentrate supplementation, initiating hay feeding or providing limited access to cool-season annual forages (wheat, rye, ryegrass, etc.).
- Similarly, during December or early January, virgin heifers should be checked for weight gain and compared to your established target weight goal.

Fall-calving herds

- Because December is the heart of the breeding season, the goal of the nutritional program should be to minimize weight and condition loss of

cows until cows are safe in pregnancy.

- ▶ Three to 6 lb. of a concentrate supplement, along with 5 lb.-10 lb. of high-quality legume hay or silage should maintain weight, body condition and milk production in most situations.
- ▶ Limited access to small-grains pasture is an excellent winter supplementation program for fall-calving cows.
- ▶ Access to small-grains pasture should be limited to about 20%-30% of actual grazing time.
- ▶ Provide a high-calcium, high-magnesium mineral supplement to lactating cows grazing small-grains forage.
- ▶ Creep-feeding is more frequently economical in fall-calving programs because grazed forage quality is low, resulting in more efficient conversion of creep feed to calf weight gain.
- ▶ Remember to report creep-fed calves as a separate contemporary group.

General recommendations

- ▶ Graze native hay meadows (that were harvested in early to mid-July) after a hard frost.
- ▶ Winter grazing and burning hay meadows helps to improve hay quality the following year and suppresses brush encroachment around the edges of the field.
- ▶ Before the end of the year, check your financial management plan and projected tax situation in case income or expense adjustments are necessary to minimize your tax burden.

Western Region

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

Fall-calving herds

Main focus — the breeding season.

1. If estrous synchronization is going to be used, a protocol should have been selected and products should be on hand. Take extra time in administering synchronization products, being sure to prevent injection-site leakage.
2. A number of synchronization protocols are available that offer the

option of timed AI (TAI). Many people today use systems that combine limited heat detection and use TAI on the females that don't exhibit estrus.

The protocols that are recommended by the Beef Reproduction Task Force are printed in almost every major AI beef sire directory and were published on pages 166 and 168 of the November 2017 *Angus Journal*.

3. Put the extra effort into heat detection because it is often the difference maker between average and highly successful AI programs.
4. Take the time and be precise with all of the details concerning semen handling and placement. If you are breeding AI for more than one cycle, inject GnRH at the time of repeat inseminations.
5. Bulls should have been semen checked and trichomoniasis tested and ready for use from a physical standpoint. In addition, they should be in the proper degree of body condition and should have been vaccinated at least 1 month prior to turnout.
6. Be sure females are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. Mineral supplementation is most important during the breeding season. We prefer to use supplements that include chelated products, especially during the breeding season.
7. Continue to monitor BCS of breeding females. The target level of BCS is 5.0 (scale = 1 to 9) for both cows and heifers. Ideally, this level of body condition should be maintained during the entire breeding season.
8. Be certain both protein and energy requirements of females are being met. Because energy balance has a major influence on fertility, have females in a state of positive energy balance (gaining weight) during the breeding season.
9. If females are grazing dry native forage, fall and winter is the time of the year when protein supplementation is most important. Price supplements on cost per pound of protein.
10. Treat calves for either scours or pneumonia promptly. Have first and

second treatment options for both conditions.

Spring-calving herds

Main focus — prepare for the calving season.

1. Although the start of the breeding period is still months away, a person should start considering potential AI sires.
2. If any precalving vaccinations, such as a scour vaccination, are going to be administered, they should be given far enough in advance of the calving season to avoid handling cows that are close to parturition.
3. Be sure equipment is in working order and supplies are on hand to assist females once calving starts.
4. Be sure cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area.
5. The target BCS at calving is a minimum of 5.0 for mature cows and 6.0 for 2-year-old heifers on a scale of 1 to 9.
6. Both protein and energy requirements need to be met to achieve the desired level of body condition at the start of the calving season.
7. The developmental period from weaning until yearling time is critical in terms of influencing the future productivity of both bulls and heifers. Avoid overfeeding either bulls or heifers as excessive fat deposition can hinder structural soundness and reproductive performance in both sexes.
8. Normally, the first month following weaning is the most challenging in terms of respiratory disease in calves. That point should have passed by now. If calves are going to be PI-BVD-tested or vaccinated for anaplasmosis using the one-shot live vaccine, this is a good time to get those samples collected and vaccinations administered.

