Angus Advisor

▶ **JANUARY** 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 synctial virus
brucellosis	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
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

Southern Great Plains

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

Spring-calving herds

- Years of research show that reproductive success is highly dependent on the plane of nutrition during the critical third trimester of pregnancy. Due to rapid fetal growth, energy and protein requirements are approximately 25% greater during late gestation compared to mid-gestation. The nutrition program should be adjusted accordingly. A 1,200-lb. Angus cow in good body condition requires a minimum of about 13 lb. of TDN and 2 lb. of protein per day during late gestation. Consequently, hay or other forages should contain a minimum of 54% TDN and 8% protein to meet requirements for maintenance prior to calving. If the forage does not meet these standards, then a complementary supplementation program should be employed.
- Prepare calving facilities and equipment. Purchase and organize calving supplies such as tags, navel dip, tattoo equipment and ink, calf scales, etc.
- Check first-calf heifers several times daily for possible calving difficulties.
- Feed during evening hours to encourage daytime calving.

Fall-calving herds

- Removal of bulls toward the end of January or early February is necessary to maintain a controlled breeding season of around 60 to 70 days.
- If a creep-feeding program is desired, consider limit-feeding a high-protein (30%-40%) supplement, such as recommended in the Oklahoma Silver program. In this program, intake of protein supplement is limited by including 10%-12% salt in the creep feed and adjusting as necessary to target consumption of around 1 lb.-2 lb. per head per day. When available, small-grains winter pasture is an excellent creep-grazing resource for fall-born calves.
- A high-calcium, high-magnesium mineral supplement should be provided to lactating cows grazing small-grains forage.

General recommendations

- Extremely cold conditions in the Southern Great Plains occasionally lead to sudden, and in rare cases, extreme losses due to cattle falling through ice on ponds and lakes. Most Southern cattle lack "experience" with ice and, thus, are highly susceptible to this natural disaster. The best prevention is to simply move cattle away from ponds and lakes to a safer source of water in the event of extreme cold. If that is not practical or possible, break ice twice a day during the extremely cold weather and feed away from the water source.
- Distribute hay feeding as much as possible to minimize perennial grass stand damage and to evenly distribute nutrients from manure and wasted hay.
- Test soil to determine phosphorus, potassium and lime needs for spring-legumes, such as lespedeza, sweet clover, red clover and white clover.
- Plan the financial management program for the year, including cash flow, deadlines for payment of interest and quarterly tax payments.

Southeastern Region

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

General recommendations

Continue the winter-feeding program. Watch body condition, and utilize winter-feeding groups according to cattle nutritional demands. Lush winter grazing may work well for stockers, heifers and fall pairs. Manage winter annual pastures to maintain at least 4 in. of stubble height. Limit-grazing can be used to stretch winter pastures and hay. Limit-graze winter annual forages for a few hours per day. Plan fertilization, weed control and establishment for the spring pasture program. Fertilize cool-season grasses before the flush of spring growth.

Be prepared for severe weather conditions. Keep proper free-choice minerals available at all times. High-magnesium mineral supplements should be used for cows on lush winter pastures to prevent grass tetany. Vitamin A supplementation is an important part of the nutritional program, particularly if frosted grass, weathered hay or coproducts are the primary feedstuffs.

Monitor water sources, breaking ice at least daily on watering tanks that are not freeze-protected. Maintain a complete herd health program in consultation with a veterinarian. Include internal and external

parasite control and vaccinations. Check for lice, and treat as needed. Start gathering records for tax purposes. Continue good production and financial recordkeeping. Set yearly and long-term ranch goals.

Spring-calving herds

Continue supplementation of pregnant females, targeting good condition at calving. Have calving supplies on hand, including calving record books, ear tags, obstetric equipment, disinfectants, calf scales and colostrum. Check expected calving dates. Observe bred cattle closely as calving approaches, giving heifers extra attention. Make sure that calves dry off quickly, receive colostrum within the first six hours of birth, and have some level of protection from wind and mud.

Separate lactating cows from dry cows to feed more efficiently. Move pairs to clean pasture and watch calves for scours. Tag, castrate, dehorn and implant calves as appropriate. Maintain good calving records, including calf birth weights.

Consult with a veterinarian to schedule prebreeding vaccinations or order vaccines. Keep yearling heifers gaining weight to reach two-thirds of mature weight by breeding time. Take yearling measurements and report performance data on seedstock cattle to breed associations. Base heifer selection decisions on performance, temperament, soundness and breeding goals.

Determine bull power needs. Make bull selection decisions for the upcoming breeding season. Gather information about bulls at central test stations and in purebred herds to locate potential herd sires. Check sale dates and review bull performance information. Line up breeding soundness evaluations, and make sure bulls are in good condition prior to the breeding season.

Fall-calving herds

The fall calving season should be completed. Calculate fall calving percentage. Cow nutrient needs increase dramatically after calving, so use the highest-quality hay and feeds for lactating cows. Monitor breeding activities in herds exposed for fall calving, and be prepared to remove bulls after a controlled breeding season. If a high percentage of cows return to heat after 40 days of breeding, have bulls rechecked for breeding soundness, consult with a veterinarian on possible disease problems and re-evaluate the nutritional program.

Midwest Region

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

Cow herd management

- Historically, cull cow prices will increase during the next two or three months. Feeding cull cows can be an efficient and profitable management decision.
- Continue feeding or grazing programs started in early winter. Weather conditions may require wrapping up grain sorghum and cornstalk grazing. Severe winter weather may begin to limit utilization of crop residues, so be prepared to move to other grazing and feeding systems.
- Research indicates winter protein supplementation has a positive fetal programming effect on subsequent offspring growth, reproduction and carcass traits.
- Supplement to achieve ideal BCS at calving. Use this formula to compare the basis of cost per pound of CP:
  Cost of supplement, $ per cwt. ÷ (100 × % CP) = cost per pound of CP.
- Use this formula to compare energy sources on the basis of cost per pound of TDN:
  Cost, $ per ton ÷ [2,000 × % dry matter (DM) × % TDN in DM] = cost per pound of TDN.
- Control lice; external parasites could increase feed costs.
- Provide an adequate water supply. Depending on body size and stage of production, cattle need 5-11 gal. of water per head per day, especially in cold weather.
- Sort cows into management groups. BCS and age can be used as sorting criteria. If you must mix age groups, put thin and young cows together to feed separately from the mature, properly conditioned cows.
- Use information from forage testing to divide forage supplies into quality lots. Higher-quality feedstuffs should be utilized for replacement females, younger cows and thin cows that may lack condition and that may be more nutritionally stressed.
- Continue mineral supplementation. Vitamin A should be supplemented if cows are not grazing green forage.
- Plan to attend local, state and regional educational and industry meetings.
- Develop replacement heifers properly. Weigh them now to calculate necessary ADG to achieve target breeding weights. Target the heifers to weigh about 60%-65% of their mature weight by the start of the breeding season. Thin, lightweight heifers may need extra feed for 60-80 days to "flush" before breeding.
- Bull calves to be fed out and sold in the spring as yearlings should be well onto feed. Ultrasound measurements should be taken around one year of age and provided to your breed association.
- Provide some protection, such as a windbreak, during severe winter weather to reduce energy requirements. The LCT is the temperature at which a cow requires additional energy to simply maintain her current body weight and condition. The LCT for cattle varies with hair coat and body condition. Increase the amount of dietary energy 1% for each degree (including wind chill) below the LCT.

Western Region

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Fall-calving herds

The main focus is getting cows bred.

CONTINUED ON PAGE **100**

CONTINUED FROM PAGE 99

Heat detection and AI-breeding. Accuracy with heat detection and taking the time to be precise with the small details of AI are both very important in determining the level of success of an AI program.

Semen. Semen handling is one of the small details that is often overlooked and also can be very important in terms of influencing the success of an AI program.

Natural-service bulls. Bulls are probably already turned out or will be shortly. If cows are being fed or are in pastures where they are easily observed, record natural-service dates.

Nutritional management

Mineral supplementation. Mineral supplementation is important in achieving optimal reproductive performance. Although females should be supplemented on a year-round basis, the breeding season is the most critical period. Mineral supplements should be formulated to meet deficiencies specific to your region or area.

Protein and energy supplementation. It is critical that both protein and energy requirements of females are being met during the breeding season. Females should be in a state of positive energy balance, or gaining weight, during the breeding season, as energy balance has a significant influence on fertility or conception rate.

Health management

Vaccinations. If not already done, calves should receive their first round of vaccinations. Producers should consult with their veterinarian in developing their vaccination protocol.

Treatment protocol. Treatment protocols should be on hand for both scours and pneumonia in suckling calves, and both should include first and second treatment options.

Spring-calving herds

The main focus is the calving season.

Reproductive management

Calving management. Supplies should be on hand and the 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 experiencing calving difficulties.

In order for maximal absorption of maternal antibodies, calves should nurse within the first 6 hours after birth. A supply of frozen colostrum should be on hand and should be replaced at the start of each calving season. Extra milk from a mature cow taken shortly after calving is the best source of frozen colostrum.

Nutritional management

Mineral supplementation. Be sure that cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area.

Body condition. The target level of body condition at calving is a BCS of 5 (scale = 1 to 9) for mature cows and 6 for 2-year-old heifers.

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.

Heifer and bull development. Hopefully, both bulls and heifers are performing at levels that will allow achievement of desired average yearling weights.

Health management

Treatment protocol. Have treatment protocols and products on hand for both scours and pneumonia in suckling calves.

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