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 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

Southeastern Region

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

General recommendations

Modify winter supplementation based on the forage situation. Offer hay before forage availability becomes limiting. Protein and Vitamin A supplementation may be needed on remaining summer grazing.

Manage winter annual pastures to maintain at least 4 in. of stubble height. Limit-grazing for a few hours per day is a good way to efficiently utilize winter forages. Stockers and fall cow-calf pairs are good groups to utilize lush winter grazing.

Service feeding equipment. Group the herd into winter-feeding groups such as average-condition cows, thin cows, and first-calf heifers. Match forage and feeding programs to the nutritional needs of each group.

Cold, wet conditions increase cattle energy requirements. Keep proper free-choice minerals and clean water available at all times. Provide high-magnesium supplementation on lush winter grazing. Watch for signs of grass tetany.

Monitor cattle for lice. Implement a complete herd health program with BQA-consistent practices and veterinary consultation.

Good recordkeeping is important for obtaining credit, assessing the operation, and filing ranch tax returns. Make end-of-year plans considering impacts on upcoming income taxes. Form alliances for marketing and bulk purchases. Plan a holiday labor schedule.

Spring-calving herds

Check breeding records for expected calving dates. Make sure calving supplies are on hand. Observe cattle closely as calving approaches, particularly bred heifers.

Nutritional requirements increase about 10%-15% in the last 30-45 days of gestation. Do not underfeed in an attempt to reduce calf birth weight. Develop heifers to reach two-thirds of mature weight by breeding time in early spring. Supplement thin cows and heifers as needed.

Feed lower-quality hay to dry cows, saving the best hay for calving season. Add weight and condition to cows identified as culls before marketing them. This is often an ideal time of year to market cows and bulls.

Allow bulls to rest and regain condition in small pasture traps. Provide additional nutrients to thin or growing bulls. Identify herd sire replacement needs. Purchase bulls with performance information.

Fall-calving herds

Fall calving is wrapping up or completed for most herds. Calculate fall calving percentage. Observe any remaining late-gestation cattle frequently. Manage these females in calving pastures near cattle handling facilities. Move cow-calf pairs to clean pasture to minimize calf health risk. Watch calves for scours. Restock calving supplies as needed.

Prebreeding vaccinations should be completed. Breeding supplies and herd sires should be on hand. Breeding is already under way in some herds and begins this month in other herds. Breed heifers ahead of the cow herd. Heifers should be of sufficient weight and on an increasing plane of nutrition at breeding. Provide excellent nutrition to lactating cows. Feed the best quality forages now.

Turn out fertile, sound, well-conditioned bulls that complement herd females and marketing objectives. Watch for returns to heat. Rotate herd sires if needed. Keep accurate breeding records.

Cattle may be nearing the end of yearling data collection age windows. Yearling cattle are still growing and need high-quality forages and feeds.

Southern Great Plains

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

Spring-calving herds

- Create a contemporary group (sort and manage separately) of 2-year-old cows and, if necessary, 3-year-olds and old cows that you intend to retain. This contemporary group can then be provided access to higher-quality stockpiled pasture, fed better-quality hay, fed more supplement or provided access to small-grains forage as a supplement. The nutritional goal for this contemporary group should be to obtain a BCS at calving that is similar to that of the remaining cow herd.
- December and early January is a good time to check weights by weighing a portion, if not all, of the virgin replacement heifers.

Using this information and the targeted breeding weight and rate of weight gain established at weaning, producers can evaluate the nutritional strategy and make necessary adjustments.

Fall-calving herds

- December is the heart of the breeding season for many fall-calving herds in the Southern Great Plains. Consequently, the goal of the nutritional program is to minimize weight and condition loss of cows that are nursing 30- to 100-day-old calves. To achieve this, 3-6 lb. of a concentrate supplement, along with 5-10 lb. of high-quality legume hay or silage may be necessary.
- In this region, limited access to small-grains pasture is an excellent and cost-effective supplementation program for fall-calving cows. Access to small-grains pasture should be limited to about 25%-33% of daylight hours.
- A high-calcium, high-magnesium mineral supplement should be provided to lactating cows grazing small-grains forage.
- December is a good time to implement a creep-feeding or creep-grazing program. Many producers seem to have the impression that creep-feeding somehow reduces nutritional stress on lactating cows. It does not. Study after study demonstrates that cows produce and calves consume the same amount of milk when calves are being creep-fed, compared to calves receiving no supplemental feed.
- Creep feed does, however, replace (or reduce) forage intake when more than about 3 lb. of creep feed is consumed. Creep-feeding programs are more efficient when forage is short and/or forage is low in nutritional value compared to times when forage is abundant and has high nutritional value. Remember to report creep-fed calves as a separate contemporary group.

General recommendations

- Begin grazing dormant weeping lovegrass pastures. Be aware that this cured forage resource is notoriously low in protein and digestibility, ranking somewhere between low-quality prairie hay and wheat straw.
- Native hay meadows can be lightly grazed after a hard frost. Leave a minimum of about 6 in. of forage regrowth and remove cattle if wet conditions develop.
- 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. Numerous financial tools are available at *www.beefextension.com*.

Midwest Region

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

Spring-calving cows

- Supplemental feeding can be needed in some operations. Supplementation programs are dependent on the cow's stage of production, BCS, forage quality, and forage availability. An 1,100-lb. dry cow grazing a low-quality forage (such as dormant native range grass) might need:
  - Dry grass — 1-2 lb. per day of a 40% CP supplement; or
  - Dry grass — 3-4 lb. per day of a 20% CP supplement; or
  - Dry grass — 5 lb. legume hay.
  - Low-quality forages are generally deficient in rumen degradable protein, trace minerals and vitamin A. Therefore, they should be the first nutrients considered when developing supplementation programs.
- Compare and buy supplements based on cost per pound of nutrient.
- Utilize crop residues. Cornstalks and grain sorghum stalks have historically been the most economical forage system for wintering spring-calving cows.
- Use proper grazing techniques to improve system efficiency.
- Cows in 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. Approximately 50 lb. of crop residue is on the field per bushel of corn harvested.
- If fields have more than 5 bu. of downed corn per acre, restrict and adjust grazing patterns to avoid rumen acidosis and/or laminitis.
- Control lice.
- Retained-ownership calves should be fed least-cost rations to maximize profit potential. Research indicates growing calves at rates greater than 2 lb. daily can have carcass quality advantages.

General management

- Document your cost of production by participating in Standardized Performance Analysis (SPA) programs.
- Review management decisions; lower your costs per unit of production.
- Check your financial management plan and make appropriate adjustments before the end of the year.

Western Region

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Fall-calving herds

The main focus now is the breeding season.

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Reproductive management

- A synchronization protocol should have been selected and products should be on hand. Implement the protocol and take extra time in administering synchronization products, being sure to prevent injection-site leak back.
- Heat detection is critically important.
- 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.
- Bulls should have been semen-checked and trich-tested and be 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 one month prior to turnout date.

Nutritional management

- Minerals should be supplemented on a year-round basis. The breeding season is the most critical time in terms of meeting mineral requirements.
- It is critical that both protein and energy requirements of cows are being met during the breeding season. Cows should be in a state of positive energy balance, or gaining weight, during the entire length of the breeding season, as energy balance has a significant influence on fertility.

Health management

- Cows should have been vaccinated at least 30 days prior to the start of the breeding period.
- 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 to prepare for the calving season.

Although the start of the breeding period is still months away, a list of potential AI sires should be developed.

Reproductive management

- If any precalving vaccinations are going to be administered, such as a scour vaccine, they should be given far enough in advance of the calving season to avoid handling cows that are close to parturition.
- Be sure that equipment is in working order and supplies are on hand to assist females once calving starts.

Nutritional management

- Be sure that cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area.
- The target level of body condition at calving is a minimum BCS of 5 for mature cows and 6 for 2-year-old heifers on a scale of 1 to 9.
- 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 developmental period from weaning until yearling time is critical in terms of influencing the future productivity of both bulls and heifers.

Health management

- 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.