



Angus Advisor

► DECEMBER herd management tips

Mid-South Atlantic Region

by **John Hall**, Virginia Tech, jhall@vt.edu

December beef management calendar

Spring-calving herds

- Market backgrounded calves.
- Feed replacement heifers to gain 1.5-1.75 pounds (lb.) per day, or use the target-weight method to calculate rate of gain.
- Monitor body condition of cows.
- Test hay for nutrient content and supplement accordingly; don't guess.
- Increase energy during cold periods.
- Check heaters in waterers regularly.
- Monitor stockpiled grass to keep cows well-fed.
- Attend bull and replacement heifer sales.
- Market cull cows this month or in January.
- Send in soil samples if not done earlier this year.
- Enjoy the holidays!

Fall-calving herds

- Begin breeding season on cows; complete artificial insemination (AI) on heifers.
- Monitor body condition on cows and especially first-calf heifers.
- Keep 2- and 3-year-old cows separate from the main herd.
- Feed cows extra energy after calving; some protein may be needed also if good stockpiled forage is not available. Cows calving at a body condition score (BCS) of less than 5 (on a 9-point scale) should receive special nutritional attention. (See www.cowbcs.info for information on how to condition score your cows.)
- Keep high-quality, high-magnesium (Mg) and high-selenium (Se) minerals available.
- Keep cows on stockpiled grass as long as available.
- Monitor condition and health of all bulls; remove and replace injured or thin bulls.
- Check heaters in waterers regularly.
- Send in soil samples if not done earlier this year.
- Enjoy the holidays!

Not out of the woods yet

Most of our region received some much-needed rain at the end of October. While this rain helped pasture conditions greatly, the drought is not over and pastures have not recovered at this point. In addition, some areas received only a small amount of moisture.

In northern areas of the region, the rain and quick green-up was followed in five to seven days by a hard freeze and killing frost. The moisture will help with plant survival this winter and some root growth, but pasture plants are still weakened. In the Deep South part of our region, pasture plants will continue to recover as long as we get more moisture and temperatures stay above freezing. Warm-season pastures will remain dormant, but cool-season pastures will continue to grow.

Across the entire region grazing management will be essential to pasture recovery and productivity.

In a previous column, we discussed grazing management after the drought. It is imperative that cool-season grasses be allowed to reach 6-8 inches (in.) in regrowth before grazing. In addition, plants should only be grazed down to 3-4 in. The temptation will be to let cattle graze all they can because of hay shortages and high feed costs. However, overgrazing plants emerging from drought conditions may cost producers more in the long run.

Beef producers need to stick with a controlled rotational grazing program. Limiting grazing and using sacrifice pastures now will improve late winter and early spring grazing. This will decrease feed needs when feed prices are at their highest. For another copy of grazing management after the drought go to www.ext.vt.edu/news/periodicals/livestock/aps-07_09/aps-903.html.

Things are looking better, and good management will be the key to a faster recovery.

Midwest Region

by **Twig Marston**, Kansas State University, tmarston@oznet.ksu.edu

Spring-calving cows

- In late fall and early winter, start feeding supplement to mature cows using these guidelines:
 - Dry grass — 1-2 lb. per day of a 40% crude protein (CP) supplement; or
 - Dry grass — 3-4 lb. per day of a 20% CP supplement; or
 - Dry grass — 10 lb. good nonlegume hay, no supplement needed.
- Compare supplements based on cost per pound of nutrient.

- Utilize crop residues.
- Strip-graze or rotate cattle to improve grazing 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.
- Limiting nutrients are usually rumen degradable protein, trace minerals and vitamin A.
- Control lice.

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.

Southern Great Plains

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

Spring-calving herds

- If not done in November, 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. Most purebred breeders do not separate thin cows from the herd because this makes genetic evaluation difficult.
- Bred heifers should have a minimum BCS of 6 by this time of year. If not, an immediate intervention strategy is necessary to achieve positive condition gain (not just weight gain due to fetal growth) before calving.
- December and early January are excellent times 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, 5-8 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. Some breeders choose to graze purebred cows on small-grains pasture fulltime for the purpose of maximizing genetic potential for milk production and weight gain of calves.
- ▶ A high-calcium (Ca), high-magnesium (Mg) 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 (like during December) 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

- ▶ Cattle afflicted with fescue foot should be removed from fescue pastures and fed different forage until they have recovered.
- ▶ 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 the OSU Agricultural Economics web site at <http://agecon.okstate.edu/extension.asp>.

Western Region

by **Randy Perry**, University of California, Fresno, randyp@cafresno.edu

Fall-calving herds

The main focus is to prepare for the breeding season.

Genetic management

Sire selection. Assuming AI is being used, sires should have been previously selected, and semen ordered and delivered. Avoid making last-minute decisions on sire selection. From a long-term standpoint, it is the most important management decision that is made each year in a purebred cattle operation.

Reproductive management

Semen. Be sure that semen is handled properly. This is one of the small details that is often overlooked and can be the difference between a good and an outstanding AI program. If cows are AIed for more than one cycle, watch return heats for any patterns that may arise in terms of problems with conception rates on particular sires. If a high percentage of return heats are represented by females that were inseminated to a particular sire, then check a unit of semen for motility or switch sires for the return service.

Synchronization protocol. The synchronization protocol should have been selected and products should already be on hand. Implement the protocol and take extra time in administering synchronization products, being sure to prevent injection site leak back with synchronization product injections.

Heat detection. The importance of heat detection can not be overemphasized. It is critical in determining the success of an AI program. Be sure to watch for all of the subtle signs of estrus. In addition, be sure that a good system is in place to communicate notes concerning females to watch more closely during the next check if more than one person is responsible for heat detection.

AI breeding. Take the time and be precise with all of the details concerning semen handling and placement. Be mentally focused on the tasks at hand. If females exhibit extended periods of estrus still inseminate on the scheduled time using the time that they were first detected in estrus and the standard a.m./p.m. rule. (If they exhibit estrus before noon they are bred that night, and if they exhibit estrus after noon they are bred the next morning.) It is better with cattle to inseminate too early as compared to too late in relation to time of ovulation. If you are breeding AI for more than one cycle, inject gonadotropin-releasing hormone (GnRH) at the time of insemination on repeat inseminations. You can use GnRH at the time of insemination on cows that have been difficult to get settled to AI in the past. However, I would not recommend using GnRH with all inseminations, as most females will settle without it.

Natural-service bulls. Bulls should have been semen-checked and trichomoniasis 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.

Nutritional management

Mineral supplementation. Minerals should be supplemented on a year-round basis. The breeding season is the most critical time in terms of meeting mineral requirements. If a mineral supplement that includes chelated products is not being used because of cost, it should be considered for use during the breeding season.

Protein and energy supplementation.

It is critical that both protein and energy requirements of cows be 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. What makes this difficult to achieve is that December is not typically a month of plentiful forage resources. Therefore, these deficiencies need to be provided through supplementation, which is challenging this year from a cost-per-unit standpoint.

Health Management

Vaccinations. Cows should have been vaccinated 30 days prior to the start of the breeding period.

Treatment protocol. As discussed last month, treatment protocols should be on hand for both scours and pneumonia in suckling calves, and both should include first and second treatment options. As cows are being handled in association with a synchronization protocol, calves are being stressed and thus are more prone to sickness. This is the main reason why I do not recommend some of the synchronization protocols that involve a number of trips through the chute prior to breeding. Not only are cows being stressed, but calves are also stressed every time they are gathered and separated from their dams.

Spring-calving herds

The main focus is to prepare for the calving season.

Genetic management

Sire selection. Although the start of the breeding period is still months away, a list of potential AI sires should be developed. Sires can be added or eliminated as additional information is gathered. As I mentioned last month, be sure that the selected sires will produce the kind of daughters that will contribute to herd improvement. My gut feeling and concern is that many of the popular sires in use today are not going to produce the kind of females that will have a long-term positive effect on our cow herds.

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Reproductive management

Vaccinations. 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. I do not like to handle females at all during the last month prior to calving.

Calving supplies and equipment. Be sure that equipment is in working order and supplies are on hand to assist females once calving starts. In addition, if injections such as selenium are going to be administered at birth, be sure that an adequate supply of those products is on hand as well.

Nutritional management

Mineral supplementation. Be sure that cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. Minerals should be supplemented on a year-round basis and can be varied depending on the time of the year and available forage resources. Mineral boluses or injectable products can be used in addition to loose or block mineral products.

Body condition. 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. Ideally, level of body condition should be maintained or improved during the breeding season. However, this is difficult to achieve, especially with cows that have high levels of milk production. Level of milk production more heavily influences nutritional requirements in lactating females than does frame size. Our problem today is that many of our Angus cattle are both too large-framed and too heavy-milking as compared to optimal levels for a Western environment.

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. As discussed last month, the developmental period from weaning until yearling time is critical in terms of influencing the future productivity of both bulls and heifers. Both sexes need to be developed at adequate rates so that differences in terms of genetic potential for growth can be exhibited. However, neither sex should be developed at extremely high rates as excessive fat deposition can hinder future reproductive performance and detrimentally affect foot and leg soundness. Heifers should

be developed at a rate that allows them to achieve a target weight of approximately 65% of their projected mature weight at the start of the breeding period.

Health management

Heifers and bulls. Normally, the first month following weaning is the most challenging in terms of respiratory disease in calves. That point should have passed by now. Both bulls and heifers should be performing at levels that will allow achievement of desired average yearling weights. Typically, the biggest challenge during this time of year is dealing with muddy conditions in lots. This year in the West a little mud would be a welcome sight. If calves are going to be PI-BVD (persistently infected-bovine viral diarrhea) tested or vaccinated for anaplasmosis using the one-shot live vaccine, this is a good time to get those samples collected and vaccinations administered.

Treatment protocol. Have treatment protocols and products on hand for both scours and pneumonia in suckling calves. You are well-advised to have first and second treatment options for both conditions, and be sure that the protocols have been communicated to the appropriate personnel.

