



Angus Advisor

► JANUARY herd management tips

Mid-South Atlantic Region

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

Spring-calving herds

- Begin to gather calving supplies.
- Keep late pregnant cows gaining 1.0 pound (lb.) per day.
- Pregnant heifers and 3-year-olds should gain 2.0-2.5 lb. per day.
- Keep high-quality minerals available.
- Review calving assistance procedures.
- Stockpile a few gallons of colostrum.
- Attend performance-tested bull sales and/or order semen for artificial insemination (AI).
- Treat cattle for lice if needed.
- Soil-test pastures not tested in the last three years.
- Order clover seed for frost-seeding later this winter.

Fall-calving herds

- Begin/continue breeding.
- Check cow and bull condition.
- Supplement energy to young bulls during breeding season.
- Send in forage test if not done earlier this year.
- Continue to check calves closely for health problems.
- Reimplant September- and early October-born calves that were implanted at birth (commercial herds).
- Treat cattle for lice if needed.
- Soil-test pastures not tested in the last three years.
- Order clover seed for frost-seeding later this winter.

January nutrition could be critical

Forage availability was highly variable this fall in the Mid-Atlantic and Southern states. As a result of abnormal pasture availability and quality this fall, many herds entered the winter in less than optimal body condition. Cattlemen should condition score their cows and make adjustments to the winter feeding program. Cows need to reach a body condition score (BCS) of 5 to 6 (on a 9-point scale) by 30 days before calving.

Remember, winter weather conditions in the Southeast and Mid-Atlantic states can be worse than in the Midwest. Temperatures that hover near freezing, combined with rain and sleet, increase the energy needed by cattle to stay warm. The air temperature below

which cattle expend energy to keep warm is the lower critical temperature (LCT). Wet cattle expend energy to keep warm at temperatures as high as 60° F. In contrast, dry cattle with winter hair coats use little extra energy to keep warm until 32° F to 20° F or less. During extended periods of wet, cold weather, producers should increase the amount of energy fed to cows by 1% for each degree below the LCT to prevent weight loss.

In practice, producers need to feed 1.25 to 1.5 lb. of energy supplement (i.e. corn, corn gluten feed, soyhulls or barley) to pregnant cows and 1.6 to 2.0 lb. of supplement to lactating cows for every 10 degrees below the LCT.

Southern Great Plains

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

Spring-calving herds

Due to rapid fetal growth, energy and protein requirements are approximately 25% greater during late gestation compared to mid-gestation.

A 1,200-lb. Angus cow in good body condition requires a minimum of about 13 lb. of total digestible nutrients (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.

Prepare calving facilities and equipment. Purchase and organize calving supplies such as tags, naval dip, tattoo equipment and ink, calf scales, etc.

Check first-calf heifers (due to calve) several times daily for possible calving difficulties.

Feed during evening hours to encourage daytime calving.

Fall-calving herds

Continue supplemental feeding of bulls, cows and calves.

If a creep-feeding program is desired, consider limit-feeding a high-protein (30%-40%) supplement, such as recommended in the Oklahoma Silver program. When available, small-grains winter pasture is an excellent creep-grazing resource for fall-born calves.

A high-calcium (Ca), high-magnesium (Mg) mineral supplement should be

provided to lactating cows grazing small-grains forage.

General recommendations

Break ice in ponds and water tanks at least once daily when necessary.

Evaluate the mineral supplementation program, considering forage and feed mineral contributions along with requirements.

- Due to extreme drought in the Southern Great Plains, many producers are feeding greater quantities of concentrate feeds that contain high phosphorus (P) and/or high sulfur (S). Examples of feeds that are high in phosphorus include corn gluten feed, distillers' dried grains, wheat midds, and barley malt sprout pellets, among others. Distillers' grains, corn gluten feed and barley malt sprout pellets are examples of feeds that contain moderate to high levels of sulfur. Be sure to consult your local Extension educator or other nutritionist for assistance in balancing the mineral program so that severe mineral imbalances are avoided.

Test soil to determine phosphorus, potassium (K) and lime needs for spring-seeded legumes, such as lespedeza, sweet clover, red clover and white clover.

Plan the financial management program for the year, including cash flow and deadlines for payment of interest.

Midwest Region

by Twig Marston, Kansas State University, tmarston@oznet.ksu.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.
- Supplement to achieve ideal BCS at calving. Use this formula to compare the basis of cost per pound of crude protein (CP):

Cost of supplement, \$ per hundredweight (cwt.) ÷ (100 × % CP) = cost per pound of CP.

Use this formula to compare energy sources on 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 gallons (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.
- ▶ Consult your veterinarian regarding pre- and postpartum vaccination schedules.
- ▶ 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 average daily gain (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

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

Fall-calving herds

The main focus is getting cows bred.

Reproductive management

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. Almost anybody with a little experience can find a cow in standing estrus. However, being able to find those females that only show subtle signs of estrus is what separates the really

good heat detectors from those who are average.

Semen. As discussed in last month's column, 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. Watch return heats for any patterns that may arise with conception rates on particular sires if cows are being AIed for more than one cycle.

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. Watch for return heats from natural-service dates. If a high percentage of females are coming back into heat, switch sires if that is an option.

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. As mentioned previously, 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 rates.

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. Typically, calves will receive vaccinations for the respiratory disease complex using a modified-live vaccine (MLV) and the clostridial diseases using either a seven-way or eight-way (if standing water is a problem) product. In addition, many producers are now vaccinating calves for *Pasteurella haemolytica* at the same time. If possible, calves should receive booster vaccinations for a portion of the respiratory diseases from two weeks to one month after the initial injections.

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.

Spring-calving herds

The main focus now is the calving season.

Genetic management

Sire selection. In a purebred cattle operation, sire selection is by far the most important management decision that is made each year. However, deciding on which sires to use is not easy because of the number of bulls available and the magnitude of information that must be analyzed in making those decisions.

The first decision that must be made before sires can be selected is to decide the goals of your operation from a genetic standpoint. Is the focus of your operation to raise bulls for the commercial cattle industry? If it is, are you going to focus on producing light-birth-weight, calving-ease bulls or high-growth, high-performance bulls, or maybe both? Or maybe your goals are to raise show heifers for your children or for other junior Angus breeders.

The nice thing about the Angus breed is that breeders have the tools and the information available to fit genetics to specific goals or production situations. There are sires available that would work for more than one of the situations described above. However, in general, a totally different group of sires will be selected depending on the genetic goals of your operation. Purebred breeders can never spend too much time and effort on genetic selection. Although the breeding season is still months away, now is the time to start developing your list of potential sires.

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 that are experiencing calving difficulties. As calves are tagged and weighed at birth, their navels should be dipped or sprayed with a mild iodine or betadine product, and if you are in a selenium (Se)-deficient area, they should receive a selenium injection at the same time.

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. The best source is a mature, heavy-milking cow that calves early in the calving season. She should be milked out shortly after her own calf nurses. Do not freeze all of the product in one bag; rather, divide it into the proper amount that would be fed to a baby calf (about one-half of a calf bottle) prior to freezing. In addition, be certain that females are being monitored for the

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incidence of retained placenta. If problems arise, treat them promptly.

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. As discussed last month, the target level of body condition at calving is a BCS of 5 (on a scale of 1 to 9) for mature cows and 6 for 2-year-old heifers. Ideally, this level of body condition should be maintained during the breeding season. However, this is difficult to achieve, especially this year in the West with the drought conditions and high feed prices that we are experiencing.

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. 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.

