MANAGEMENT

Angus Advisor

► **FEBRUARY** herd management tips

Mid-South Atlantic Region

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

Spring-calving herds

- ► Have all calving supplies on hand, and review calving assistance procedures.
- ► Move pregnant heifers and early-calving cows to calving area about two weeks before due date.
- ► Begin calving late in month (some herds).
- ► Check cows three to four times per day, heifers more often. Assist early if needed.
- ► Keep calving area clean and well-drained; move healthy pairs out to large pastures three days after calving.
- ► Ear-tag and dehorn all calves at birth; castrate male calves in commercial herds.
- ► Give selenium (Se) and vitamin A and D injections to newborn calves.
- ► 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, high-magnesium (Mg) minerals available.
- ► Vaccinate cows against scours if it has been a problem.
- ► Attend performance-tested bull sales and/or order semen for artificial insemination (AI) program.
- ► Frost-seed clovers (mid- to late February).
- ► Attend a local beef education meeting.

Fall-calving herds

- ► End breeding early in the month.
- ► Remove bulls to bull pasture and check condition.
- ► Begin creep-feeding or creep-grazing calves if desired.
- ► Plan marketing strategy for calves.
- ► Begin feeding high-magnesium minerals to prevent grass tetany.
- ► Continue to check calves closely for health problems.
- ► Inventory winter feed supplies.
- ► Frost-seed clovers (mid- to late February).
- ► Attend a local beef education meeting.

Good body condition essential

February is a good time to score cows for body condition if it has not been completed this winter. Cows should be in body condition score (BCS) 5 or 6 at calving, and first-calf heifers should be in BCS 6 or 7. Body condition needs to be maintained at BCS 5 or increased during the breeding season.

For more details on scoring body condition, visit the Angus Productions Inc. topic site *www.cowbcs.com* and the American Angus Association web site *www.angus.org/anguseducation.html.* Use cow BCS to make decisions on feeding and weaning. Thin cows should be grouped together to receive additional energy. Early weaning is a good option to consider for young cows and thin cows. Seedstock producers should ensure calves are old enough for data to be used in Angus Herd Improvement Records (AHIR®).

Pasture renovation needed in 2008

February is an excellent time to revitalize pastures in our region. Many pastures throughout the Southern region had a tough year. Drought took its toll on these pastures.

Proper soil pH, soil fertility, grazing management and incorporation of legumes will help all pastures in our region. All lime applications should be completed this month to allow changes in pH to occur before the major growing season. Phosphorus (P) and potassium (K) levels should be checked with soil tests, and fertilizer applications should be made according to recommendations from your state's Extension service. These recommendations take into account regional variations in soil type and forages.

Care should be taken not to overgraze drought-stressed pastures early in the growing season. Pastures coming out of a drought are fragile, and the plants have limited carbohydrate reserves for early spring growth. Pastures really need to be 6-8 inches (in.) tall before extensive grazing to allow these drought-stressed plants time to recover some energy reserves and root mass. Delaying the grazing of drought-stressed pastures is difficult, as hay supplies are often limited. Rotational grazing will improve the vigor of these pastures as well.

Frost-seeding clovers is an excellent way to add legumes to pastures. In our region, February is the ideal month for frost-seeding. Seeding should occur early in the month in the southern areas and late in the month in northern parts of the region.

For frost-seeding, pastures are grazed short (not a problem at this time of year), then clover seed is broadcast over the pasture. Seeding rates are 4-6 lb. per acre for red clover, and 1-2 lb. per acre for white clover. The freezing and thawing action of cold nights and warm days creates good soil contact with the seed without the need to drag the pasture. Hoof action of cattle also helps incorporate the seed. For more information on frost-seeding, contact your local Extension service.

Southern Great Plains

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

As this column was prepared for publication (late-December) this winter was shaping up to be a nasty one. In Oklahoma, we've had several days with temperatures hovering around 30°-33° F with freezing rain, ice and wind. More miserable weather conditions do not exist for a bovine.

A lot of our good cattlemen in Oklahoma continue a long-standing coffee shop argument relative to the "best" winter feeding program. We call it the "20s vs. 40s debate." Some say the most economical approach is to meet protein requirements with a high-protein feed product, such as 38%-40% range cubes. The idea is to optimize forage intake and digestibility by providing adequate protein, and it is hoped energy available from forage will suffice. Others are adamant that more supplemental energy is critical.

One common approach is to feed twice the amount of an 18%-22% feed product, resulting in the same (or similar) protein intake but twice the supplemental energy. The success of either program depends on a lot of variables, including initial cow condition, cow age, forage quality, timing of calving relative to timing of higher-quality forage availability and, yes, weather. I can't predict the weather through February, but as I do my Christmas shopping this year, it sure is looking like a 20s year to me.

Spring-calving herds

- ► The vast majority of spring-calving herds in the Southern Great Plains are bred to calve during February, March and April. Most purebred herd managers choose to manage their herds for earlier calving compared to commercial herds. Therefore, many purebred cows will be in late gestation or early lactation during February. As noted last month, 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.
- ► When cows graze abundant native range as the primary forage base during early

lactation, 7 lb. of a high-energy concentrate feed containing 20%-24% protein and about 5 lb. of good-quality alfalfa hay is necessary to meet these requirements and to minimize weight loss prior to the breeding season. If high-quality grass hay (minimum of 9% protein and 54% TDN) is the primary forage base, about 6 lb. of a high-energy supplement containing 20%-24% protein is required.

- During early lactation, energy and protein requirements increase dramatically. Assuming above-average genetic potential for milk production, these cows would require about 19 lb. of TDN and 3.4 lb. of protein. This is roughly equivalent to a diet containing about 59% TDN and 11% protein.
- Maintain cows on fresh clean pasture or in a dry, clean calving facility if they are confined. Consult your veterinarian in the event that calf scour problems develop.
- Check several times daily first-calf heifers that are due to calve for possible calving difficulties.
- Feed during evening hours to encourage daytime calving.

Fall-calving herds

- Fall-calving purebred cows with above-average genetic potential for milk production should receive about 7 lb. of a supplement containing 20%-24% protein daily when the following conditions exist: Abundant dormant native range (3%-5% protein) is available and cows are at a BCS 5 or less and/or winter weather conditions are severe. A second alternative that works well under these conditions is to feed around 4 lb. of a protein supplement containing 20%-24% protein with 5 lb. of good-quality alfalfa hay.
- When conditions are similar to the example given above with the exception cows are at a BCS 6 or greater and moderate to mild winter weather, a supplement containing 38%-40% protein will meet the protein needs of the cows. Daily energy intake will be slightly deficient, resulting in lower milk production and about a 0.25-unit loss in BCS during a 30-day period.
- Assuming moderate- to high-quality grass hay (minimum of 9% protein and 54% TDN) as the forage base, 5 lb. of a 12%-14% concentrate supplement will supply adequate protein and energy for 1,200-lb. purebred cows with above-average genetic potential for milk production.
- If not done in January, remove bulls or discontinue artificial insemination (AI) to maintain a restricted calving season.
- A high-calcium (Ca), high-magnesium mineral supplement should be provided to lactating cows grazing small-grains forage.
- Continue to monitor calves for the possible development of bovine respiratory disease (BRD).

General recommendations

- Break ice in ponds and water tanks at least once daily when necessary.
- Fertilize fescue and small-grain pastures, depending on moisture, soil test and forage production needs.
- Sprig Bermuda grass during late February and March in a clean, firm seedbed.

Midwest Region

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

- Monitor cow BCS. Once calving begins, body condition is tough to maintain and even more difficult to gain. Review nutritional management, diet ingredients and formulation. Balancing energy and protein will often maximize efficiency.
- Separate the cow herd into management groups. Examples would be: gestating, lactating, young, old, moderate to heavy condition and poor condition groups. Group feeding allows producers to better utilize available feed resources, improve herd health and produce a more consistent product.
- Minimize cold stress. Windbreaks greatly reduce maintenance energy demands. Hypothermia is a major cause of neonatal calf loss.
- If appropriate, vaccinate the cow herd for calf scours and other diseases. Consult your veterinarian. Three factors that improve herd health are high immunity, low stress and excellent sanitation practices.
- Consider using the Sandhills Calving System developed by the University of Nebraska. This system has been proven to essentially eliminate scours. (For details see *http://vbms.unl.edu/extension/sandhills%20scours%20paper%20smith.pdf.*)
- Check calving heifers and cows regularly. Adhere to a herd-monitoring program. Give timely assistance when needed; call for help before problems have progressed beyond control.
- Feeding calving cows in the evening and at night will increase the percentage of calves born in daylight hours.
- Udder and teat scores should be recorded within 24 hours of calving (see page 120).
- Birth dates, birth weights and calving ease scores should be recorded.
- Source and age verification will be necessary for some marketing plans. Make sure you stay in compliance.

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- Control lice. Hair coat condition is important for insulation value. Sale cattle — bulls and females — that will be offered this coming spring need healthy-looking hair to demand top dollars.
- Collect and report weights, ultrasound and linear data on last year's calf crop if their age is appropriate. The future of beef production is in data collection and genetic information development.
- Attend beef industry educational and policy events. Be informed and proactive within the industry you work.

Western Region

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

Fall-calving herds

The main focus is that cows and calves are on cruise control.

Reproductive Management

Natural-service bulls. Bulls should be turned out and hopefully are doing their job. Watch for return heats from natural service dates, and if a high percentage of females are coming back into heat, switch sires if that is an option.

Nutritional management

Mineral supplementation. As discussed in previous columns, it is important that minerals are supplemented on a year-round basis. Supplements should be formulated to meet deficiencies specific to your region or area.

Protein and energy supplementation. Most fall cows in the West graze native foothill pastures during the winter months. As is the case in any environment, timing and amount of rainfall are the two critical factors that determine the pattern and amount of forage production. In most years in California, mid-February marks the start of the good forage-production period in the foothills. Therefore, cattle should not need any supplemental energy or protein during this time of the year.

Health management

Treatments. This is the time period of the year when fall-calving cows and calves should have very few problems if any with animal health. In fact, if they are in the foothills, if you have a well-fenced pasture and if you have a dependable water source, these cattle need to be checked on a very infrequent

basis, if at all. Spend your time in the office working on other aspects of your operations, such as developing a marketing plan.

General management

Early spring is an excellent time of the year to work on general repairs, such as repairing and building fences and other facilities. Also, if irrigated pastures comprise part of your pasture resources during the summer months, this is the time to make repairs to irrigation lines or ditches before they are needed later in the spring.

In addition, I would encourage you to spend some time in the office working on setting long-term and short-term goals for your operation. Most producers spend the majority of their time providing the physical labor associated with beef production. Most smaller-scale producers enjoy being outside and working with cattle and have the opinion that they cannot afford to hire help to perform these duties.

Stan Parsons, in his "Ranching for Profit" seminars, used to talk about WITB vs. WOTB. WITB stands for "working in the business" and is doing the physical work associated with the business. WOTB stands for "working on the business" and is working in the office doing strategic planning and goal setting, and trying to improve the operational efficiency of your operation. We can usually hire somebody to provide WITB for slightly above minimum wage; whereas, time spent on WOTB has the potential to pay significant dividends on a time-spent-per-hour basis.

If your operation is not large enough to justify hired labor and/or you don't want to give up those duties because you enjoy doing them, that is fine. However, do spend the time sitting down at the table with a blank piece of paper developing some strategies for how you can improve your operation. Development of a marketing plan is an excellent example of one of these activities. How many producers have ever really developed a written marketing plan?

Spring-calving herds

The main focus is the calving season.

Genetic management

Sire selection. The importance of sire selection was discussed at length in last month's column. Although the start of the breeding season is still a couple of months away, now is the time to start finalizing your list of potential AI sires so that semen can be

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ordered to avoid last-minute problems with timely delivery.

Reproductive management

Calving management. Females should have already started calving or should be calving shortly. In previous columns, we have discussed supplies that should be on hand and the importance of having personnel properly trained or advised as to how to assist females with calving problems.

Any female that retains a placenta should be treated promptly. If females are treated promptly, usually just an injection of either a prostaglandin (PG) product such as Lutalyse® or oxytocin will suffice. Both of these products will cause muscular contractions in the uterus causing the female to expel the placenta. If the condition has persisted for a longer period of time, then it is usually advised to combine the previously mentioned injections with uterine infusion of a mild antibiotic product such as penicillin mixed with sterile water.

Nutritional management

Mineral supplementation. It is important that females receive adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. These minerals should be provided on a year-round basis. Many of the nutritional companies now have mineral supplements that are tailored to different times of the year and forage conditions.

Body condition. As discussed last month, 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. Ideally, this level of body condition should be maintained during the breeding season. However, many times the goal of maintaining body condition

during the breeding season is difficult to achieve.

Protein and energy supplementation. The period from calving through the end of the breeding season is by far the most important period in terms of meeting protein and energy requirements of beef cows. If cows are to maintain a yearly calving interval, which is the goal of most beef producers, then they must conceive by 80 days postpartum. This goal is extremely difficult to achieve if nutritional requirements are not being met.

The most practical way to monitor energy status (the relationship between energy consumed vs. energy required) is to evaluate BCS. The most practical way to monitor level of protein intake is to evaluate the animal's fecal output. If the stool is loose and the cow pies flatten out on the ground, the animal is receiving an adequate level of protein intake. If the fecal output is extremely firm and the cow pies do not flatten out on the ground, then the animals are most likely protein-deficient. By February, provided that you have received normal rainfall, forage resources should be adequate in terms of both protein and energy content assuming that you are not overstocking your pastures.

Health management

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

General management

The comments described above in the area of general management for fall-calving herds would also apply for spring-calving herds. In addition, you should be preparing to take yearling measurements of heifers and bulls, including ultrasound measurements. AJ