# **Southeast Region**

by John Hall, Virginia Tech, jbhall@vt.edu Spring-calving herds

- ► Move pregnant heifers and early-calving cows to calving area about two weeks before due date.
- ► Continue calving.
- ► Check cows three to four times per day; check 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.
- ► Tag all calves at birth; castrate male calves in commercial herds.
- ► Give selenium (Se) and vitamin A and D injections to newborn calves.
- ► Feed cows extra energy after calving; some protein may also be needed.
- ► Keep high-quality, high-magnesium (Mg), high-selenium minerals available.
- ► Purchase estrus synchronization supplies; line up artificial insemination (AI) technician or AI supplies.
- ➤ Order fertilizer; start getting equipment ready.
- Last chance to frost-seed clovers this spring (do so early in the month).

#### **Fall-calving herds**

- ▶ Pull bulls to maintain a 60- to 75-day calving season.
- ➤ Relocate 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.
- ► Make first selection of replacement heifers.
- ➤ Order fertilizer; start getting equipment ready.
- Last chance to frost-seed clovers this spring (do so early in the month).

Primiparous cows (first-calf heifers) have longer postpartum intervals than mature cows. These valuable young cows need to conceive early in their second breeding season to remain in the herd and be productive cows. Consider jump-starting primiparous cows to induce earlier first cycles after calving.

Several management techniques can reduce postpartum interval and increase cyclicity in primiparous cows. However, these management strategies will not replace proper nutrition and health programs.

Expose cows to progestins either through

feeding melengestrol acetate (MGA) or inserting a CIDR®. These progestins mimic the initial increase in progesterone that precedes the first cycle. In herds that use AI, selecting an estrus synchronization system that incorporates MGA or a CIDR is the easiest manner to expose primiparous cows to progestins. For herds using natural service, feeding MGA for seven to 10 days to cows beginning 20 to 30 days prior to the breeding season will induce cyclicity in most anestrous cows.

Research indicates that exposure of primiparous cows to gomer bulls or cycling cows beginning about 30 days before the breeding season can reduce postpartum anestrus by 10 to 14 days.

Isolating calves from primiparous cows for 48 hours, especially in combination with estrus synchronization, will increase the number of cows cycling. In drought or limited feed situations, early-weaning calves that are 75 to 90 days old will increase cyclicity and pregnancy rates in primiparous cows.

If you are interested in more information on jump-starting cows, consult your Extension professional or veterinarian.

## **Midsouth Region**

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

#### **Fall-calving herds**

Cool-season annual and perennial forages should be growing rapidly. These high-quality forage resources can be used as a supplement to low-quality standing forage or hay. One very effective limit-grazing strategy is to use four-hour grazing bouts at two- to four-day intervals, depending on stage of production, condition and age of the cows, and quality of the dry forage base. Another common method is to graze cows on the coolseason pasture for two days, followed by three to five days of grazing low-quality forage or hay.

In many native range situations, coolseason annual grasses will begin to grow, resulting in increased protein content of the diet. One effective strategy is to switch from a high-protein supplement, such as 30% to 40% protein, to a moderate protein supplement in the 20% to 25% range. Hay feeding may be advised, although only if standing forage is becoming limiting. Since the breeding season has ended, a modest loss of weight and condition is acceptable for 4- to 8-year-old cows.

Vaccinate heifer calves between 4 and 10

months of age for brucellosis (Bang's disease).

## **Spring-calving herds**

Limit-grazing cool-season pasture is equally as effective for spring-calving cows, although more difficult to manage with baby calves

March and early April are frequently the times of year when spring-calving cows lose the most weight. Some producers avoid rapid weight loss by feeding high-quality hay during this short period, while others reduce the protein concentration in the supplement and increase the feeding rate.

If Al is to be used, plan the synchronization system and purchase the necessary supplies and products. Some systems require implementation of the synchronization plan as early as 35 days prior to the initial breeding date. Many universities publish fact sheets that describe various synchronization systems.

Breeding soundness exams (sometimes referred to as BSEs) should be performed on herd bulls, preferably before spring bull sales. Since bulls will be restrained during this procedure, this is an opportune time to perform other maintenance steps, such as vaccinating, trimming feet, tagging or retagging, cutting hair away from ear tags, etc.

After calving and before breeding (30 days before, preferably), vaccinate cows according to your local veterinarian's recommendations.

Early March is a good time to check weights on replacement heifers to determine if an adjustment in their nutritional program is necessary. The traditional recommendation is to target 65% of expected mature body weight by the beginning of the breeding season [715 pounds (lb.) if mature weight is 1.100 lb.].

### **General recommendations**

Sample soil from established Bermuda grass, old world bluestem and love grass pastures to determine fertilizer needs. Coolseason perennial forages can still be fertilized in early March, if not already done.

Remove old growth from weeping love grass and Old World bluestem by grazing, clipping or burning.

Hay feeding areas in improved pastures should be burned, raked, lightly tilled if necessary, and reseeded with grasses and legumes. With a little early-spring maintenance, these damaged areas can recover rapidly.

If not already completed, plant or

broadcast spring-seeded legumes, such as lespedeza, sweet clover, red clover and white clover. Remember to inoculate legume seeds before planting. Inoculation is an inconvenient and often-overlooked step that pays huge dividends.

Use prescribed fire to improve forage quality, reduce ticks, and control weeds and brush.

Magnesium-fortified mineral supplements should be supplied to cows grazing coolseason annual or cool-season perennial forages.

# **Midwest Region**

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

Manage calving pens and pastures to minimize human, cow and calf stress. Stay organized.

- ➤ An observation schedule should be implemented for calving first-calf heifers and cows. First-calf heifers should be checked every two to three hours.
- Sanitation is key to reduce and/or eliminate calf scours. An excellent calving pasture management plan by David Smith from the University of Nebraska-Lincoln can be found at <a href="http://beef.unl.edu/beefreports/symp-2003-19-XVIII.pdf">http://beef.unl.edu/beefreports/symp-2003-19-XVIII.pdf</a>.
- Make sure every calf consumes adequate colostrum during the first four to 12 hours after birth.
- ► Keep accurate calving records, including cow identification (ID), calf ID, birth date, calving difficulty score and birth weight. Other traits to consider recording are teat and udder scores, calf vigor score, and other pertinent information. This information, along with Angus sire information, is vital for enrolling cattle in the AngusSource<sup>SM</sup> program.
- Calving books are essential sources of information; make sure you have a backup copy.

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- ➤ Condition score cows. Thin and young cows will need extra energy to maintain yearly calving interval.
- ► If cow diets are going to be shifted from low-quality forage (poor-quality forage or dormant grass) to high-quality forage (lush green grass), begin a grass tetany prevention program at least three weeks prior to the forage switch.
- ► When making genetic selections, use the most recent National Cattle Evaluation (NCE) and herd records judiciously.
- ▶ If new bulls are purchased, now is the time to start preparing them for their first breeding season. Bulls need to be properly vaccinated and conditioned to be athletic. A bull having moderate body condition with abundant exercise is ideal.

- After calving and before breeding, vaccinate cows as recommended by your veterinarian.
- ▶ Plan to attend beef production meetings.

# **Northwest Region**

by **Thomas Hill,** Oregon State University, thomas.w.hill@oregonstate.edu

#### **Calving management**

Recognize that first-calf heifers have a 500% greater risk for calving difficulty than mature cows.

Feeding pregnant cows between 11 a.m. and noon and again at 10 p.m. (plus or minus one hour) has been demonstrated to result in 75% of birth events occurring in daylight hours. Best results with this feeding regimen require that it begin two to four weeks before calving.

Careful observation and experience will dictate when to provide assistance to calving

cows. Heifers should complete the birth process in four hours or less, and cows should calve in less than three hours. If no progress in the birth process is seen after 60 minutes of significant labor contractions, assistance should be strongly considered. Research from Miles City, Mont., conducted by Bob Bellows makes a strong case for early assistance compared to a longer parturition event. The findings of Bellows and coworkers showed that cows that were assisted as soon as the front feet were visible and the cervix was fully dilated, regardless of calving difficulty, were more likely to be cycling at the beginning of breeding season (91% vs. 82%) and had a higher pregnancy rate during a 45-day breeding season (92% vs. 78%).

# **Breeding management**

Nutrition, primarily energy, will be a major factor in pregnancy rate. Precalving nutrition will influence the length of anestrus, and

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postcalving nutrition will influence fertility rates. The optimum body condition score (BCS) is a 5 (on a scale of 1 to 9).
Reproduction efficiency and a limited-duration calving season are two of the most influential variables for increased profitability.

For a calving season to begin Jan. 10, bulls need to be turned out April 1. Be sure your herd bull battery is vaccinated, sound, in proper body condition and fertile.

Vaccination for brucellosis is regulated by statute and varies between states. In general, brucellosis vaccinations must be administered to heifers between 4 and 8 months or 11 and 12 months of age (depending on jurisdiction) if they are intended for breeding or will cross state lines. A licensed veterinarian must give this vaccination. Monitor the age of your

heifers to be sure these females receive a timely brucellosis vaccination.

#### Pasture management, grass tetany issues

Obtain soil samples to evaluate costeffective methods to increase soil fertility and improve pH.

Hypomagnesemia, or grass tetany, occurs in the early spring grazing period. Grass tetany is caused by cows grazing rapidly growing forage when the nighttime temperatures are below 50° F. This early, immature spring forage is low in magnesium. Heavy-milking cows (high risk), followed by milking first-calf heifers (moderate risk), then steers (low risk), are vulnerable to grass tetany. Grass tetany risk is greater in soils with high levels of potassium (K).

Symptoms of grass tetany occur rather quickly, often in less than 24 hours.
Symptoms can include excitability, lack of muscle coordination, loss of motor control, coma and death. Cows showing early signs of

the disease need to be handled quietly to not complicate their condition. Cows down for more than 12 hours run the risk of significant long-term muscle damage.

If properly diagnosed and treated early, cows can be successfully treated with calcium (Ca) and magnesium intravenous (IV) therapy.

Magnesium mineral supplementation is the most effective management protocol to control grass tetany. Supplementation must begin 30-45 days before turnout onto high-risk forage. Magnesium oxide is the most practical and useful source of magnesium. Intake of magnesium oxide should range between 10 grams (g) and 20 g per day for most grazing situations.

Recognize that magnesium is rather unpalatable and therefore requires products to enhance intake, such as molasses, grain products or salt. Magnesium intake will be enhanced if no other mineral supplements are made available.