Southeast Region

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

Spring-calving herds

- ► Finish calving.
- ► 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.
- ► Tag all calves at birth; castrate and implant 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.
- ► Implant commercial calves at turnout if not implanted at birth.
- ► Keep high-quality, high-magnesium (Mg) and high-selenium minerals available.
- ► All bulls need a breeding soundness exam (sometimes referred to as a BSE) 30 days before the start of breeding season.

Fall-calving herds

- ► Creep-graze calves while on cows.
- ▶ Give preweaning respiratory vaccinations for infectious bovine rhinotracheitis (IBR), parainfluenza-3 virus (PI₃), bovine viral diarrhea (BVD), bovine respiratory syncytial virus (BRSV) and pasturella.
- ► Collect 205-day weights on calves; weigh and condition score cows.
- Wean commercial calves based on marketing plan for calves — many valueadded feeder cattle programs require calves to be weaned 45 days before delivery.
- ➤ Reimplant commercial calves do not implant replacement heifers.
- Pregnancy-check cows 60 days after bulls are removed.
- ► Continue feeding high-magnesium minerals to prevent grass tetany.

Pastures and forages

- Fertilize pastures and hay fields according to test
- ▶ Begin management-intensive grazing (MiG).
- ► Check hay-making equipment.

Rapid grazing in early spring can help manage pastures

Forage production in the Mid-Atlantic and Southern regions is generally overabundant in spring and early summer, followed by a

dramatic decrease in pasture quality by late June. The primary cause of decreased pasture quality is cool-season grasses becoming overly mature.

One strategy to delay this increase in maturity and decrease in quality is to rapid-graze or top-graze pastures. Cow-calf pairs are moved every week to a new pasture with the goal of grazing off the top one-third to one-half of available forage. This strategy should result in cows grazing off the flag leaf and developing seedhead as the plant enters the boot stage. Since cool-season forages (fescue, orchardgrass, etc.) are determinate grasses, removal of the seedhead eliminates seed production and maturation of the plant.

Eventually, seedheads will develop on tillers or plants that cattle could not graze before seedhead emergence. However, this grazing strategy should delay the reduction in forage quality by two to three weeks.

Dry areas may want to consider early weaning

Although much of the South has had good moisture this winter, Texas, Oklahoma and Arkansas are still extremely dry. Producers with fall- or winter-calving herds in these areas may want to consider early-weaning calves. Early weaning allows for reduced feed needs for cows and focusing of limited grazing and higher-quality feeds for growing calves and replacements. Weaning before the breeding season or early in the breeding season can increase pregnancy rates in cows with less-than-optimal body condition.

Special diets for early-weaned calves have been developed by several Extension specialists across the region. Contact your local Extension educator or consulting nutritionist for diets using ingredients available in your area. In commercial herds, calves can be weaned as early as 90 days of age. For purebred producers, calves need to be at least 120 days old so weaning data can be used in the Angus Herd Improvement Records (AHIRSM) system.

Midsouth Region

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

Spring-calving herds

1. Plan to implement estrus synchronization systems for heifers and cows. Some systems require initial management steps as early as 31 days in advance of the targeted initial breeding date. If not already done, purchase supplies for artificial

- insemination (AI), acquire semen, and check facilities and equipment. Don't forget to find and test the thawing bath *before* the first cow walks in the chute for breeding.
- 2. The anestrous period in cows calving at 2 years of age is about two to four weeks longer compared to mature cows.

 Therefore, many producers choose to initiate the breeding season for virgin heifers two to four weeks in advance of mature cows.
- Research has demonstrated that bull exposure, initiated within 30 days of calving, reduces the anestrous period by one to two weeks in 2-year-old cows.
- 4. Plane of nutrition can have an effect on conception rates during the breeding season, and this effect seems to be more dramatic in 2-year-old cows. In one study with 2-year-old cows, a high plane of nutrition (resulting in cow weight gain) during the breeding season resulted in a 76% first-service conception rate compared to a 58% first-service conception rate in cows that were provided a maintenance plane of nutrition. Providing 2-5 pounds (lb.) per head per day of an energy supplement may be necessary to achieve a high plane of nutrition in areas where abundant forage is not available until midto late April.
- 5. If not previously done this year, consult your veterinarian about vaccinating cows a minimum of 30 days prior to breeding.
- **6.** Conduct breeding soundness exams for all herd sires if not completed in March.

Fall-calving herds

Consult your veterinarian to plan the vaccination program for fall-born calves and to purchase the necessary supplies. An ideal situation is to vaccinate two to six weeks prior to weaning and again at weaning. If not done in March, implant steer calves and heifers not intended to be kept as replacements.

General recommendations

 Introduced warm-season forages, such as Bermuda grass and Old-World bluestem, should be fertilized in late April through mid-May. Approximately 50 lb. of nitrogen (N) is required to produce about one ton of forage. Efficiency of nitrogen use is improved if multiple applications (generally two or three) are made. More nitrogen is typically applied in the spring because moisture availability is consistently abundant.

- 2. High-magnesium mineral supplements should be provided for cattle grazing coolseason forages through the month of April.
- 3. A moderate- to low-phosphorus (P) mineral supplement (10% phosphorus or less) is recommended for most classes of cattle and forage types during the lush spring growing season. Most forage species contain adequate phosphorus, and some species contain excessive phosphorus during this period.
- 4. Plan a fly and tick control program. Check spraying equipment, dust bags and oilers, and purchase needed chemicals or tags for fly and tick control. Use insecticideimpregnated-ear tags if ear ticks are a problem and there is no resistance in your area.
- Establish new stands of lovegrass in April and May. Spray weeds in Bermuda grass and native grass pastures in late April or May.
- 6. Controlled burning programs can still be effective in early April in some areas to control weeds and brush. Controlled burning has also been shown to increase weaning performance of fall-born calves.

Midwest Region

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

Many producers should consider calving in April. Stress is minimized, and forage/grass management may be optimized.

- ► Keep calving areas as clean and dry as possible. Give each calf a dry, comfortable and clean environment.
- Supplement and feed cows to maintain or improve body condition prior to the breeding season (cows should be in moderate body condition by the start of the breeding season to maximize fertility).
- ➤ For thin, young cows, consider feeding fat to improve rebreeding rates. Research indicates that when feeding about 0.4 lb. per head per day of a plant source (soybean, sunflower, safflower oils), fat can increase first-service conception and pregnancy rates (0% to 15%). Feeding fat can be effective both before and after calving. Consult your nutritionist.
- ➤ Mineral supplementation should include greater levels of magnesium [intake should be between 15 and 30 grams (g) per head per day, or at least 11% of the mineral mix] for grass tetany prevention.
- ▶ Plan your breeding season, both AI and natural service. Make sure all supplies and semen are on hand prior to the breeding season. For natural-service programs, assign yearling bulls to 10-15 cows; 2- and 3-year-old bulls to 20-25 cows; and older bulls to 25-40 cows. Breeding for 65 days should be long enough; less than 90 days is a key sign of good management. Some suggest the service capacity of a yearling bull (less than

- 24 months) is equal to his age in months at turnout.
- ▶ Bulls should be in good body condition prior to the breeding season. Thin bulls can run out of stamina. Now is the time to make sure bulls are physically capable of performing for the upcoming summer breeding season.
- Breeding soundness examinations are recommended for all bulls.
- ► Consider using estrus synchronization and AI. Several synchronization systems to overcome anestrus are available. Selection depends on labor, facility and implementation costs.
- Consider breeding heifers three weeks prior to the mature cow herd to give them a greater chance to rebreed as 2-year-olds.
- Maintain top management concerning calf scours (sanitary conditions, early detection, electrolyte/dehydration therapy).
- Vaccinate calves as per veterinarian consultation. Castrate males that are not candidates for breeding stock prior to pasture turnout. Implant calves that will be sold at weaning.
- ➤ Wait to apply fly control until critical numbers are reached (100-200 horn flies per animal).
- Deworm cows and bulls if needed. Expect performance response to be variable, dependent on location, weather, grazing system, history, infestation level and management.
- Use prescribed burning techniques to eradicate Eastern Red Cedar trees and improve forage quality.
- Good fences make good neighbors. Summer pastures should have had fences checked, repaired or replaced by now.
- Check equipment (sprayers, dust bags, oilers and haying equipment) and repair or replace as needed. Have spare parts on hand; downtime can make a large difference in hay quality.

Northwest Region

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

Breeding management

- Maintain cows and heifers with a minimum body condition score (BCS) of 5. Recognize that cows and heifers have separate nutritional needs and thus can be better managed in separate groups.
- ➤ Vaccinate open cows and heifers against IBR, Pl₃, BVD Type 1 and 2, five strains of lepto and vibriosis. Consult with your herd veterinarian to ensure a comprehensive reproductive health plan.
- Evaluate the advantages of synchronization programs for replacement heifers and cows.
- Consider the advantage of using prostaglandin (PG) therapy for late-calving cows that are cycling. Use of prostaglandin

- at the beginning of the natural-service breeding season can move up the breeding date for many cows that calved later in the calving season.
- Complete breeding soundness exams for the entire bull battery. Monitor breeding activity of the bulls if possible; record breeding events and watch for repeat breedings 18 to 21 days later.
- ► A proper bull-to-cow/heifer ratio will enhance a short-duration calving season. Depending on terrain and pasture size, a guideline for bull usage would be: 15-20 cows per yearling bull (12-24 months of age); 20-25 cows per 2-year-old bull; and 25-30 cows per mature bull.

Calf management

At approximately 8 weeks of age, calves should be vaccinated for clostridial diseases (eight-way or eight-way with redwater). Passive immunity from the dam for these bacterial diseases is shorter than for viral infections of IBR, BVD, PI₃ and BRSV. Vaccination of 8-week-old calves for the viral diseases (four-way) is not necessary in most herds due to the high level of maternal antibody protection that the young calf still has. If branding is done, a hotiron brand on the hip or shoulder will create less hide discount than a rib brand, according to the 2004 Beef Quality Audit.

Spring deworming

Create and/or maintain a strategic deworming program. Strategic deworming programs require an understanding of parasite life cycles, monitoring parasite load and proper selection of anthelmintics. Parasite loads will normally be low in cattle fed harvested forage throughout the winter. Thus, deworming at turnout, while convenient, may not provide highly effective results.

Recognize that cattle ingest parasite larvae and cysts while grazing forage. This fact requires treatment for internal parasites during the grazing season. The level of parasite infection should be monitored by collecting fecal samples from 5%-10% of the herd. Sampling requires only a teaspoon of material from fresh fecal matter that can be stored in a container that is protected from temperature extremes. Your local veterinarian will be able to do fecal egg counts, as well as investigate for fluke and coccidia infection.

Pasture management

- Forage production is optimized when plant energy from root reserves is not required. To reduce the effects of grazing on root energy reserves requires maintaining a leaf canopy or rapid use of the leaf canopy and then removal of cattle.
- Grass tetany may still be a problem with cooler areas, especially when cows are lactating.
- Harrowing pastures to distribute manure will enhance pasture fertility and help break the life cycle of some internal parasites.

