January

**Nutrition:** Cow nutrition/body condition from this month to calving, affects future reproductive ability and quality of colostrum. Replacement heifers and first-calf heifers require more nutrients per pound than mature cows. If possible, separate heifers and thin cows from the main herd for feeding. Good quality, stockpiled grass hay should meet protein and energy requirements but use your fall or winter forage test to evaluate. Lower quality hay may need supplementation. Provide shelter (hillside or trees) to keep the energy requirements to a minimum. A quality vitamin-mineral supplementation program is required. Beef cows will consume 5 to 11 gallons of water per day during cold weather. Be aware of frozen pond hazards. Keep replacement heifer calves gaining enough to reach their “target weight (65% mature wt.) by the start of the breeding season. Feed hay in areas where mud is less of a problem.

**Health:** Check for mange and lice infestation and treat with approved pesticide. Observe cows for signs of abortion, such as stringy or cloudy discharge from the vulva and cows coming into heat. Do not handle an aborted fetus without plastic gloves. Take fetus to your veterinarian for diagnosis. Consult your veterinarian for advice on vaccinations to control calf scour. Most products require 2 injections initially, 3-6 weeks apart, with an annual booster. The second dose or the booster should be given 3-4 weeks before expected calving to ensure maximal immunity in the colostrum.

Lameness can be a problem during this time of the year. The lameness is initially brought on by freezing injury to the hooves rather than a case of foot rot. The problem is due to the melting of the manure/mud in high traffic areas. This mud becomes attached to the body and refreezes and causes breaks in the skin and hooves. These breaks allow the foot rot organism into the hoof. Prevention can be achieved by removing the mud from the hoof or feeding in dry, better drained areas. Foot rot problems that are diagnosed early can usually be successfully treated using antibiotic labeled for foot rot.

**Management.** Clip hair away from tags or brands for ease of identification at spring calving time.

**Marketing.** You can price cattle at a different time than when cattle are being delivered. Use your local auction barn for actual prices and Chicago feeder cattle futures for anticipatory prices for when you will sell the cattle. Calculate the basis between the local auction barn price and the Chicago feeder cattle prices.

**Business.** Take feed and livestock inventory early in the month so that a financial statement for last year can be prepared. Perform year-end business analysis calculating profit (or loss). Compare this year-end analysis to previous analysis history and look for strengths and weaknesses.
Attend educational beef cattle meetings and workshops. Consider getting certified so you can do mortality composting.

**Forage and Soils.** Carefully strip graze or rotate through stockpiled tall fescue pastures to maximize forage utilization. Place orders for clover seed and grass seed early in the spring. Plan pasture utilization and possible need of nitrogen fertilizer in some pasture fields for early spring growth. Apply nitrogen to pasture fields in early spring only if the anticipated need for forage exceeds the expected flush of spring growth.

**February**

**Nutrition.** Maintain nutrition levels of the cow herd similar to recommend during January. Grain may be needed if you are feeding lower quality hay (3-4 lb. for mature cows and about 8 lb. for first-calf heifers). If cows weren't removed from stalk fields earlier, remove them now to avoid soil compaction. Supplement with magnesium at least 30 days prior to calving. Cows need 20 grams of magnesium daily or 4 oz./day of a 15% magnesium oxide to prevent grass tetany. Adding 6-10% molasses or soybean meal will assure intake of a home-made mineral mix containing this level of magnesium.

**Health.** Familiarize yourself with the procedures for assisting cows at calving. Clean and disinfect calving facilities and equipment. Commercial colostrum supplements are not as good as the real thing. Avoid using colostrum from another herd, if possible, because it may introduce diseases such as Johne's disease. Have the following items available for calving season.

- Selenium injections for white muscle disease if needed
- Supplemental fluids and electrolytes for calf diarrhea
- Restraint area to assist difficult births with light
- Medication for scours and respiratory diseases.
- Ear tags and applicator for identification
- Dehorning and castration equipment
- Facilities to warm chilled calf
- Obstetrical chains or puller
- Iodine for calf's navel
- Frozen colostrum
- Vitamin injections
- Halter

**Management.** Move pregnant heifers and early calving cows to the calving area about 2 weeks before due date. Begin checking for calving. Cows that have been in labor for 2-3 hours without obvious progress should be examined and assisted if necessary.

**Genetics.** Begin looking for herd sires (AI/natural) that meet herd and farm goals.

**Soils and Forage.** Begin pasture renovation with legumes. Frost seeding should be done on pastures that have been grazed very hard and of adequate pH in order to suppress competition to new seedlings once growth begins. Frost seeding will be most successful on pastures with a fair amount of bare ground, and if pastures having weaker sods. After broadcast seeding, putting animals back on pasture for a short time to tread in the seed and increase seed soil
contact can be useful, but don't leave animals on for too long, especially if soils are wet. A no-till drill can be used when seeding legumes and grasses and may give better results than broadcast frost seedings. Clovers are most successfully frost seeded than other legumes. Birdsfoot trefoil can be frost seeded, but it usually requires excellent sod suppression for successful establishment. Alfalfa is more frost sensitive in the early seedling stage and is less desirable for frost seeding. Some grasses can be frost seeded, but successful seedings are better accomplished with a no-till seeding in the late summer.

**Marketing.** Continue analyzing cash and futures feeder cattle prices and project your profit potential and cost of production for selling your backgrounded/finisher calves immediately or at a later date. Share this marketing plan with your banker even if you are not borrowing any capital this month.

**Business.** Prepare a monthly cash flow for your beef cattle enterprise and your total farm business. Write out your production calendar and marketing plan for next year. Review marketing plans to coincide with loan repayment schedules. If not feasible, show it to your banker and suggest a revised loan repayment schedule. Inform tax preparer of sales of unbred heifers in the breeding pool because they are considered breeding livestock by the IRS. The Schedule F tax form can be used as a business tool. The farm expenses are a total and a quick analysis can be helpful. Identify the operations major expenses. Evaluate methods to reduce these major expenses.

**March**

**Nutrition.** Separate cows that have calved from the remainder of the herd. If the cow is poorly fed during this period, milk production, calf growth, and date of rebreeding are affected. Continue grass tetany prevention.

If you have not been monitoring the selenium status of your cows, you may need to give selenium injections to calves at birth to prevent white muscle disease. Research has shown, however, that oral supplementation of the cow at levels that insure her tissue selenium status is adequate will result in improved calf performance over that of injected calves born to deficient cows.

**Health.** Remember; give shots in the neck region. When calving has begun, observe calves for signs of scours and be ready to administer supplemental fluid and electrolytes. Try to be sure calves get colostrum within the first 2 hours of birth. The calving area should be clean and dry. A dry pasture with good sun exposure is ideal. Calving pens or corrals can allow buildup of disease causing organs if they are not very clean and well ventilated.

If calf scours has been a problem in the herd, the use of specific vaccines, such as for E. coli may be helpful. These should be given according to the manufacture’s recommendations and are usually best given to the cow to insure protective antibodies in the colostrum. The last dose of vaccine should be given about 30 day before calving for maximum protection. Consult your veterinarian for specific products that may be useful in your herd.

Castration is best performed within 5 days of birth. If these practices are not performed at birth or during baby calf processing, it should be done by the time the calf is 30-60 days old. Similar
to castration, dehorning should be done as soon as possible to reduce stress of dehorning older animals. There are portable, rechargeable electric dehorners.

**Management.** Soon after delivery, dip the calf's navel in 2-7% tincture of iodine. Be sure that proper mothering occurs, especially with first-calf heifers. Identify each calf with ear tag or tattoo; record birth weight and calving ease score.

**Genetics.** Weigh yearling bulls and heifers. Plan your bull needs and begin the process of getting additional bulls/ semen if necessary. Doing it now allows time for isolation and testing for brucellosis, tuberculosis, and other diseases. Determine if the bull is ready for breeding by having a breeding soundness exam done.

**Marketing.** Backgrounded/Growing calves should be reaching critical weights where you either sell them or finish them.

**Business.** Compare your projected feed production for this year with your projected feed requirements developed in your business plan. Do they match? Finalize your forage and grain production plans for the next year.

**Forages.** Frost-seed early in the month recommended legumes in legume deficient pastures, if not already done. Prepare for new pasture plantings, and seeding can begin the last of March to early April depending on weather conditions.

**April**

**Nutrition.** Mineral supplementation is a year-round process but make sure sufficient phosphorus is available in a free-choice mineral. Feed more energy if lactating cows are thin and not cycling.

**Genetics.** Require performance records such as EPDs, birth weight, weaning weight, yearling weight, and average daily gain when purchasing bulls or semen.

**Reproduction.** Conduct a breeding soundness evaluation on herd sires. If you use natural breeding, be sure you have enough bulls: 10-15 cows per yearling bulls; 20-25 cows per two-year-old bull; 30-35 cow per mature bull. Order semen and check equipment if artificial insemination is used. Condition bulls by providing them with pasture before the breeding season. Trim bulls feet, if needed, at least three weeks prior to turning them into the cow herd. Yearling British heifers should weigh a minimum of 600 pounds and exotic heifer a minimum of 700 pounds before being bred.

**Marketing.** If you are considering yearling steers on grass this summer, start gathering weekly auction prices for 500-600 pound feeder steers. Compare this to August-September futures price for 700-800 pound steers that you will be selling so you can start developing break-even values.

**Soil and Forages.** Smooth and re-seed hay feeding and heavy traffic areas. Hold off pasture until adequate growth (Orchardgrass/Fescue 8-10 inches, bluegrass 4-5 inches). Recommendations vary more specifically with grass specie. By developing a series of pastures
(paddocks) across various forage species of different growth periods, you can spread out the 57 percent of annual Ohio forage growth that occurs during April, May and June. Plan and implement grazing systems and rotations. Prepare for hay harvest. New pasture seedings of cool-season species should be made as early in the month as possible. If warm season grasses are desired in the future year, seeding should be in mid-April to mid-May.

**May**

**Nutrition.** If grazing legume pasture, observe cattle for bloat. Keep magnesium, phosphorus, selenium and other minerals available. Avoid high endophyte fescue pasture during breeding if possible. A pasture with interseeded legumes would be preferable to straight fescue.

**Health.** If not done yet, dehorn and castrate calves before fly season. Implant calves using proper technique. Vaccinate calves for blackleg at about 2 months of age. Vaccinate for respiratory diseases if they have been a problem. Worm calves if indicated. Vaccinate breeding females for IBR, BVD, lepto, vibrio to booster immunity before breeding. Clean corral and calving equipment.

**Reproduction.** Strive for a 45 to 60-day breeding season of the main cow herd. Five to 6 percent of the herd should be coming into heat per day. If this is not occurring, reevaluate the nutrition and health program. Breed replacement heifer one estrous cycle before the cows. Begin estrous synchronization programs for AI.

**Genetics.** Line-up AI services and/or purchase replacement bulls at least 30 days prior to the start of the breeding season. Choose a breed and use EPDs.

**Marketing.** Buy yearling calves for grass, but be cautious you are buying when yearling prices are typically at their season high.

**Soil and Forage.** Use rotational grazing and consider creep grazing. Make 1st cutting hay. When grasses make seed head, quality goes down. If more forage is available than can be fully utilized, limit pasture size and harvest excess forage as hay. Seed warm season annuals for supplemental feed.

**June**

**Nutrition.** Check water supplies because water is extremely important for hot weather. Provide a free-choice mineral mix containing adequate levels of phosphorus, vitamin A, selenium, copper, zinc and other trace minerals at all times.

**Health.** Check for pinkeye in cows and calves. Control flies with sanitation, insecticidal ear tags, back rubbers, bags, spray or insecticidal feed additives. Cows returning in heat could be due infection or injury of the bull, infections of the cow’s reproductive tract, and ovarian disease and cystic ovaries (nymphomania). Cow not coming into heat are probably due to nutritional deficiencies.

**Reproduction.** Turn bulls in with cow herd for March-April calves. Check bulls daily for condition and breeding capacity.

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**THE OHIO STATE UNIVERSITY**

**COMMERCE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES**

**OHIO BEEF HERD MANAGEMENT CALENDAR**

5
Marketing. Study August and September feeder cattle prices for stocker cattle and early weaning options.

Soil and Forages. For maximum carrying capacity, rotate pasture. Don't overgraze pastures. Consider the feasibility of creep grazing. Finish making first cutting hay early in month. Start grazing warm season grasses. Soil test for late summer seedings.

July

Nutrition. Have adequate water available. Set aside high quality second cutting hay for growing or lactating cattle next winter and spring.

Reproduction/Health. Remove bulls after 60-day breeding season to reduce calving interval. Since the herd is gathered to remove the bulls, this might be an opportune time to deworm, reimplant, vaccinate, and provide fly control treatment.

Business Planning. Compare actual year-to-date cash expenditures to your written business plan. Determine if you are ahead or behind your business plan's schedule. Attend educational field-days.

Soil and Forages. Start grazing warm season grasses. Move cattle to some hay fields to give pastures a rest. Begin stockpiling of selected fescue areas for fall pastures. Soil test and make corrective applications of lime and fertilizer to fields to be seeded in late summer.

August

Nutrition/Management. Watch for pastures getting short. Management options are supplementing the entire herd, early weaning, and creep feeding/grazing. Creep feeding/grazing will maintain calf weaning weights but will not improve cow condition score. Another option is to only early wean or creep calves of first-calf heifers. Water consumption can be 20 gallons per day.

Health. Watch for acute pulmonary emphysema if moving cattle from short pasture to lush pastures. Use caution when grazing or feeding drought stressed corn stalks, sorghum-sudan grass and cereal grain hay because of nitrate and prussic acid poisoning. If pastures are short, watch for consumption of poisonous plants. Continue fly control and pinkeye treatment.

Marketing. Determine if yearling steers price have peaked for the pasture season.

Forage. Continue pasture rotation. Seed new pasture seedings and interseed grasses into pastures using no-till drills if stand renovation is desirable. Begin harvest of corn silage. Plant perennial grasses based on recommendations. Soil sample and fertilize hay/pasture fields as needed. Begin stockpiling of tall fescue pastures for late fall and winter grazing. Apply 50 to 60 pounds of nitrogen per acre to areas to be stockpiled if additional carrying capacity is needed. If brassicas (eg. Turnips) are to be used for late fall grazing; they should be seeded in early August.

September
**Health.** Prepare for weaning time activities. Get facilities ready for working cattle. Line up supplies and drugs for fall weaning. Develop a program for grub and lice control.

**Management.** Consider a preconditioning program. Getting calves accustomed to eating grain from a creep feeder can make their time adjustment to harvested feed easier.

**Marketing.** Finalize your marketing plans for this calf crop. Evaluate: (1) selling the calves at weaning, (2) winter calves for going back to grass next year, (3) backgrounding calves for sale January-March next year, and (4) retained ownership and finishing the calves. Decide how many heifers will need to be held back for replacements. Seasonal cow prices are generally at a low in the fall and at a peak in the spring. Decide if cull cows will be sold this fall or wintered and sold next spring.

**Business Planning.** Inventory your potential winter feed supply and decide if you need to access other feed sources. Compare actual year-to-date cash flow expenditures to your planned cash expenditures. Make changes in cash flow plan and marketing plan needed to meet financial commitments.

**Forage.** Continue pasture rotation, taking into account the need to allow tall growing legumes (alfalfa, birdsfoot trefoil, red clover) a fall rest period of at least six weeks of uninterrupted growth before a killing frost. Continue stockpiling tall fescue for late fall/winter grazing. Plant winter rye or other winter cereals to be used for supplemental forage in late fall and early spring. Complete soil sampling and fertilization of hay/pasture fields as needed.

**October**

**Nutrition.** Dry, pregnant mature cow have reduced nutrient requirements during the early part of gestation and can be maintained on poor pasture. However, if they then this is a very economical time to supplement and improve their condition score. Beware of grazing restrictions on certain crop herbicides when considering crop residues for grazing. Set target weights for replacement heifer and fed accordingly.

**Health.** Vaccinate replacements for IBR, BVD, lepto and vibrio. Implement a grub and lice control program. Consider deworming cows and calves. Remove insecticidal ear tags. Beware of prussic acid poisoning when grazing frosted sudangrass crosses.

**Genetics.** Select replacement heifers utilizing performance record. Select some extra to enable culling before the breeding season. Pregnancy test the herd and cull open cows. It may also be advantageous to re-condition these cows if facilities and cheap feed is available. Cull problem cows or marginal producers.

**Management.** Check the teeth of your older cows. Cow with poor teeth don't maintain their weight.

**Marketing.** Make final decision to sell or hold weaned calves. Decide marketing strategy on cull cows.
Determine opportunity cost of feeding your home grown feeds as contrast to selling the feed on the open market. Determine who will pay you more for your feed - your neighbor or your cattle.

**Business Planning.** Prepare an income tax estimate for this year. This way you can practice tax management for the rest of the year by adjusting expenditures and/or income to maximize after tax income. Inform tax preparer if the cows and heifers being sold were raised or purchased.

**Forage.** Apply phosphate, potash, and lime according to soil test recommendations. Start inventory of hay supplies and test hay quality.

**November**

**Nutrition.** Have your hay tested. Utilize crop residues as needed or available. Begin utilizing early stockpiled tall fescue. A killing frost, alfalfa can be grazed. Supplement cows that are in thin body condition. Develop a feeding program for replacement heifers.

**Business.** Arrange for purchase of any forages need for winter feeding program. Using a limit-fed corn system may actually be the cheapest alternative.

**Forage.** Begin grazing winter rye, brassicas, and stockpiled perennial forages as needed. Grazing should begin on supplemental forages first and stockpiled fescue last. Limit access of cattle to pastured forage by strip grazing or carefully rotating through pastures to reduce waste and maximize forage utilization.

**December**

**Nutrition and Forage.** Put priorities on winter forage supply as follows: (1) feed lowest quality forage to mature dry cows during early winter, (2) fed highest quality forage to young stock, and (3) feed medium quality forage to dry cows during late pregnancy and to mature herd sires. Feed hay so as to minimize waste.

**Health.** Watch for abortions. Have aborted fetuses checked by a veterinarian. Observe feces for coccidiosis. Check cow frequently for hair loss due to external parasites.

**Marketing.** Study past year's marketing prices and compare to last few years. Determine where we are in the beef price cycle. Evaluate your last year's market plan and establish why your actual experience deviated from the plan.

**Business Planning.** Develop your winter feeding program based on: (1) current feed inventories and (2) daily feed requirements of each type of cattle in the inventory. If considering an AI program next year, attend a training school in your area.
Beef Cattle Information

OSU Beef Team Web Site
http://beef.osu.edu

Mid-West Beef Cattle Handbook
1-800-562-3618 or www.mwpshq.org
Spiral Notebook $50 CD $25

The Beef InfoBase
1-608-848-9055 or www.adds.org
Web subscription $35 (Good) for 12 months
CD and Web subscription $99