Beef Cow Management
Yearly Check List

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Nutrition: Nutrition, beginning this month, affects a cow's future reproductive ability. Cows are beginning the last trimester of gestation. Separate heifers and thin cows from the main herd. Replacement heifers and first-calf heifers require more energy, protein, calcium and phosphorus and vitamin A. Energy requirements are increasing naturally due to calf development and may increase another 10-15 percent due to cold weather. Good quality prairie hay may meet the requirements. Lower quality hay may need some supplementation. Provide shelter to keep the energy requirement to a minimum. Nonprotein nitrogen supplements can be convenient to feed, but natural protein sources have higher utilization values. A mineral supplement containing salt and phosphorus is advisable. Vitamin-A deficiencies often follow periods of cold weather. Vitamin-A requirements may be twice as great. Vitamin A can be fed via green leaf hay supplements. Vitamin-A injections can provide sufficient Vitamin A for two to four months. Beef cows require 5 to 11 gallons of water per day during cold weather.

Health: Check for mange and lice infestation. Treat with approved pesticide when indicated. Treat ringworm. Observe for cows in heat and abortions. Do not handle an aborted fetus without plastic gloves. Take fetus to your veterinarian for diagnosis. Inject pregnant females with scours vaccine and follow up with a booster shot.

Lameness can be a major problem during this part 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 lot surface by the animal's body heat. 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, if possible, or providing bedding. Foot rot problems that are diagnosed early can be successfully treated using penicillin and/or in combination with sulfa drugs. Consider feeding zinc methionine in supplemental feeds to help prevent foot rot.

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

Marketing: Start your marketing program for your wintered/backgrounded calves. Marketing is the separation of the pricing decision from the delivery decision. Selling, on the other hand, is pricing the cattle at the same time that they are delivered. Astute managers frequently price cattle at a different time than they deliver the cattle.

Since backgrounded cattle can be priced (forward contracted) at any time rather than just the day they are delivered, start evaluating pricing alternatives for your backgrounded calves. Astute managers will price their cattle when they believe that prices are at or near the top regardless of when they are going to sell them. They will typically sell their cattle when feed supplies are projected to be liquidated. Start looking at your pricing alternatives and calculating a profit projection for each marketing (pricing) alternative.

Start gathering weekly feeder cattle prices for backgrounded cattle. Typically we use 600-700 feeder steers prices. Use your local auction barn prices for cash prices and Chicago feeder cattle futures for anticipatory prices for when you will sell the backgrounded calves. Use your microcomputer to prepare price charts and written market analysis notes on: (1) current feeder cattle cash prices, and (2) where the futures markets suggest feeder cattle prices will be in the next one to three months. Calculate the basis between the local auction barn prices and the Chicago feeder cattle
prices for March and April. Plot the basis. Calculate your profit projections by comparing your projected selling prices to your projected breakeven cost of production.

**Business Planning:** Take feed and livestock inventory early in the month so that a true financial statement for last year can be prepared. Perform year-end business analysis calculating profit (or loss) of the farm/ranch business and particularly the beef cow enterprise. Compare this year’s year-end analysis to your last five years’ year-end analyses. Identify your businesses’ production and financial trends. Look for early signals of business strengths and weaknesses.

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**FEBRUARY**

**Nutrition:** Maintain nutrition levels of the cow herd similar to recommendations as outlined in January. Consider providing supplemental energy and protein to cows 45 to 60 days prior to calving if cows are in poor condition.

**Health:** Clean and disinfect calving facilities and equipment. Check calving dates and observe cows to determine if some might calve early. Have the following items available for calving season:
- Iodine for calf’s navel
- Ear tags for identification
- Dehorning and castration equipment
- Frozen colostrum
- Medication for scours and respiratory diseases
- Selenium shots for white muscle disease
- Obstetrical chains

**Marketing:** Continue plotting and analyzing cash feeder cattle prices and March and April futures prices. Project your profit potential based on the futures prices and your projected costs of production. Compare these projections with selling your backgrounded calves immediately and selling any surplus feeds. Think through your marketing alternatives and design a written marketing plan that selects your best marketing alternative. Share this marketing plan with your banker even if you are not borrowing any capital this month.

**Business Planning:** Review your last year’s year-end analysis and current beef cattle situation and outlook reports and decide if it would be profitable and/or feasible to expand or reduce the cow herd this year. Prepare a beef cow enterprise production plan for the next 12 months.

Prepare a monthly projected cash flow of your proposed beef cattle enterprise and your total farm/ranch business. Project your costs of production to be used in your marketing plan. Write our your production and marketing plan for the next year.

Review loan repayment schedules and compare to your business and marketing plan. Revise beef cattle marketing plans to coincide with loan repayment schedules. If not feasible, go to the banker and suggest a revised loan repayment schedule. Don’t wait for the payment to be due to suggest the revised schedule. Share the business plan with your banker to show your anticipated credit needs and your projected repayment schedule for the rest of this calendar year.
**MARCH**

**Nutrition:** Separate cows that have calved from the remainder of the herd. A cow's nutrient requirements are high for a time after calving (82 days). Protein and energy are especially important to the cow because of the high level of lactation. Supplement prairie hay with approximately 5-6 pounds of alfalfa hay or 1.5-1.6 pounds of soybean meal or commercial supplement. If the cow is poorly fed during this period, milk production, calf growth, and date of rebreeding are affected.

**Health:** Calving area should be clean and dry. Check heifers every two hours. Check cows several times daily. Be ready to assist cows not making progress after two to three hours of labor. When pulling a calf, use the device to pull down, not straight out. Have a supplemental heat source ready for chilled, weak calves. Make sure calves get colostrum as soon after calving as possible (two hours) for disease prevention. Observe calves for scours and pneumonia. Weigh, ear tag, tattoo, and dip navels of calves in iodine after calving. Maintain records of birth weight, calving date, difficulty of birth, and general vigor of calf.

**Genetics:** Weigh yearling bulls and heifers. Maintain your herd on a performance testing program:

- ND Beef Cattle improvement Association
- NDSU Research and Extension Center, Box 1377
- Hettinger, ND 58639

**Marketing:** If you still have your backgrounded calves, continue your price watching and price analyzing activities. Backgrounded calves should be reaching critical weights where you either sell them or decide to retain ownership and finish them. Expect price discounts for extra heavy calves (above 700 pounds) as they may finish too heavy for today's markets.

If retained ownership is a possibility, obtain contract prices that you can get for your type of finished animals 110-140 days into the future. Prepare profit projections with these contract prices. Decide if the profit potential is worth the risk of retained ownership.

**Business Planning:** Compare your projected feed production for this next year with your projected feed requirements developed in your business plan. Do they match? Will you have a feed surplus or feed deficit? Finalize your forage and grain production plans for the next year. Decide if you are projected to have surplus grass for the coming season.
**Nutrition:** Have a phosphorus source in the form of free-choice mineral mix. Mineral supplementation is a year-round process. Yearling British heifers should weigh a minimum of 600 pounds and exotic heifers a minimum of 700 pounds before being bred. Feed more energy if lactating cows are thin and not cycling.

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

**Reproduction:** Have a breeding soundness evaluation for herd sires. If using natural breeding, be sure you have enough bulls: 10-15 cows per yearling bull; 20-25 cows per two-year-old bull; 30-35 cows 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.

**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 September futures prices for 700-800 pound steers that you will be selling so that you can start projecting your buy/sell margin.

April is generally the seasonal high price for cull cows. Consider selling cull cows during this month.

**Business Planning:** Determine what your profit potential is for yearling steers on grass.
MAY

(Spring Handling Season)

Nutrition: Have brome or crested wheatgrass pastures available for grazing in the spring and reserve native pastures for summer grazing. If grazing legume pasture, observe cattle for bloat. Include magnesium oxide in the mineral mix if grass tetany could be a problem. Cows on pasture should have access to phosphorus and salt.

Health: Dehorn and castrate calves before fly season. Implant calves using proper technique. Vaccinate calves for blackleg and malignant edema. Vaccinate for respiratory diseases if they have been a problem. Worm calves if indicated. Vaccinate breeding females for IBR, BVD, lepto, and vibrio to booster immunity before breeding (may be done in fall instead). Clean calving pens, corral and calving equipment.

Management: Make preparations for hay season.

Reproduction: Strive for a 45 to 60-day breeding season for 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 heifers one estrous cycle before the cows.

Marketing: Buy yearling calves for grass, but be cautious as you are buying when yearling prices are typically at their seasonal high. Continue gathering futures prices for August and September 700-800 pound steers. Typically, feeder steer prices are higher in August than in September. In addition, grass cattle frequently gain very little in September; therefore, August marketings may be more profitable. Draft a written marketing plan for steers on grass and share with your banker.

Business Planning: Evaluate the profit potential of: (1) contracting your selling price of steers off grass, (2) using options to place a floor on fall grass steer prices, and (3) pricing your steers on the cash market as you sell them off grass and assuming all of the price risk.

JUNE

Nutrition: For maximum carrying capacity, rotate pastures if possible. Don't overgraze pastures.

Health: Control flies with sanitation, insecticidal ear tags, backrubbers, bags, spray or insecticidal feed additives. Cows returning in heat could be due to the bull, vibrio, trichomoniasis, cystic ovaries (nymphomania), or uterine infection. Cows not coming into heat are probably due to nutritional deficiencies.

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

Marketing: Continue to study August and September 700-800 pound feeder cattle prices.

Business Planning: Decide if contracting your selling price now would be profitable or if it would be profitable to continue absorbing all of the price risk.
**JULY**

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

**Reproduction:** Remove bulls after 60-day breeding season to reduce calving interval.

**Marketing:** Study August and September 700-800 pound feeder cattle prices. Compare current cash prices with projected futures prices. Decide if you are making a profit marketing grass through these cattle or if you would be better to idle the grass.

**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.

**AUGUST**

**Nutrition:** Crimping or grinding is not necessary for creep feed. Energy-creep rations usually include oats, corn or barley. This type of creep would be fed if forage is inadequate for cows and calves or if dams are milking poorly. Limit the consumption to around 4-5 pounds per day.

Protein creeps, such as soybean meal, limit-fed with salt can increase weaning weight when conditions are favorable for their use. This would be fed when there is adequate but low quality forage such as late summer grass. Limit protein creep to 1-2 pounds per day. Adding 10-15 percent salt to the protein creep is a good place to start for limiting intake.

**Health:** Watch for acute pulmonary emphysema if moving cattle from short pasture to pastures with good growth. Use caution when grazing or feeding drought stressed corn stalks, sorghum-sudan grass and cereal grain hay because of nitrate poisoning.

**Marketing:** Determine if yearling steer prices have peaked for the pasture season.

**Business Planning:** Decide if you should sell steers off grass now, hold them until September even though daily gain decreases, or consider retained ownership and finishing the feeders yourself.
SEPTEMBER

Health: Prepare for weaning time activities. Get facilities ready for working cattle. Line up supplies and drugs for fall roundup and weaning. Develop a program for grub and lice control. Vaccines intended to prevent respiratory diseases must be administered two to three weeks prior to weaning.

Management: Consider a preconditioning program. Getting calves accustomed to eating grain from a creep feeder and hay from a creep area will make their weaning time adjustment to harvested feeds easier.

Marketing: Finalize your marketing plan for this year's calf crop. Evaluate: (1) selling the calves at weaning, (2) wintering 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.

   Adjust market plan to fit with your business plan.

Business Planning: Inventory your potential winter feed supply and decide if you need to cut corn silage. 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.

OCTOBER

(Fall Handling Season)

Nutrition: Dry pregnant mature cows have reduced nutrient requirements during the early part of gestation and can be maintained on crop residues or poor pasture. Cows can easily use a 50 percent straw ration. Thin cows should gain in condition on sunflower fields and for the first month on combined corn fields. Three to 4 pounds of good alfalfa or a natural protein concentrate should be considered after the first month on corn fields. Set target weights for replacement heifers and feed accordingly.

Health: Vaccinate replacements for IBR, BVD, bangs, leptos and vibrio. Apply insecticide to all cattle for grub and lice control. Worm cows and calves if necessary, especially those exposed to continuously grazed and short pastures. Remove insecticidal ear tags.
Genetics: Select replacement heifers utilizing performance records. Select some extras to enable culling before the breeding season. Pregnancy test the herd and cull open cows. Cull problem cows or marginal producers. Keep early calvers ahead of late calvers so as to sell more weight next fall.

Management: Check the teeth of your older cows. Cows 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 contrasted to selling the feed on the open market. Determine who will pay you more for your feeds - 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.

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NOVEMBER

Nutrition: Move cows to winter pasture or quarters. Adjust feeding program according to the condition of the cows. Divide herd into separate groups for best winter optimum performance and minimum nutritional cost. The groups should be: (1) weaned heifer calves, (2) first- and second-calf heifers and old thin cows, (3) the main cow herd (divide high and low milkers if possible) and (4) herd sires.

Maintain cows in crop residue or pastures or supply harvested feed. Start wintering cows with poorest hay. Provide Vitamin A supplement if hay is poor quality. Watch for water belly.

Marketing: Arrange for purchase of any forages needed for the winter feeding program. Buy forages early in the winter if the state's forage supply looks short.

Business Planning: Concentrate on production.
Nutrition: Put priorities on winter forage supply as follows: (1) feed lowest quality forage to mature dry cows during early winter, (2) feed highest quality forage to young stock, and (3) feed medium quality forage to dry cows during late pregnancy and to mature herd sires.

Increase daily energy allowance to cows by up to 30 percent over mild weather if severe cold weather occurs. Increase should be as silage, good hay, or some grain if already feeding substantial amounts of straw.

Health: Watch for abortions. Have aborted fetuses checked by a veterinarian. Observe feces for coccidiosis. Check cows 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 and the cattle cycle. Determine if cattle prices are trending upward or downward and why. Evaluate your last year's market plan and establish why your actual experience deviated from the plan. Determine what you can do to improve next year's marketing 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. Follow the feed allocation strategies laid out in the December nutrition section.