Winter Grazing and Spring Calving
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The winter of 2017/2018 had record snowfall for a lot of areas in Montana. Supplemental feeding is the highest expense most ranches face, typically 50 – 80 percent of the operation costs. The Milton Ranch in Roundup, Mont., curbs this expense with a focus on rangeland health. Its cattle graze the ranch 365 days a year (weather permitting) and are managed for both animal and land performance.

Supplementation for the Milton Ranch depends on cow condition, grass condition, and weather. Following weaning in November, the young cows are separated from the old cows, as the young cows receive more supplement and graze pastures with better wind protection. The young cows receive 6-8 pounds of alfalfa hay per day and the old cows receive 4-5 pounds per day. The hay is good quality, 18 percent protein, and is fed as free choice every four days. Bales are fed every three days closer to the third trimester. Feeding large amounts (20 pounds per cow) of hay every four days ensures that all cows have access to the high protein hay. Bill Milton says the protein is important for feeding rumen bacteria, and can stay in cattle's system for that long. The bales are placed where additional nutrients can benefit the land, i.e., shallower soils or poorer condition areas. When snow cover limits access to the dormant perennial vegetation or when it is really cold, barley straw is fed as an energy supplement, with enough bales provided for 2 to 3 days' worth of feed.

The key to this system is keeping the cattle on fresh feed whether the pasture is growing or dormant. This requires planning pasture moves year round. The cattle get use to moving frequently and are drawn to the fresh stockpiled feed. These pastures have received a year's worth of rest following a multi-year grazing rotation, which allows for the stockpile feed. Temporary electric fence is moved away from water every day to every third day depending on the management objectives. Moving the temporary fence away from water allows access to drinking water and reduces the amount of access to fresh feed. The fence acts as a management tool to target grazing intensity / desired animal impacts. Stock density is easily adjusted when moving across the stockpiled pasture as pasture size is easily changed the next time. A manager is constantly planning the size of the next pasture from the level of impacts he or she sees from the last one. Pasture size / stock density differs throughout the year. On March 1, the temporary fencing was being moved every other day and gave 300 head of the old cows access to 20 acres of stockpiled feed. This is a stock density of 15 cows per acre or 16,875 pounds of cattle per acre (cow size varies from 1,050 – 1,200 pounds, 1,125 lbs. average). Moving the temporary electric fence takes about an hour for each herd. The pasture size varies daily throughout the year and is dependent on the type and amount forage, weather conditions, and level of utilization desired for range health.

March 1, 2017 Milton Ranch
"Rancher Conditioning" - Moving the temporary fence away from water allows access to drinking water and reduces the amount of access to fresh feed. The fence acts as a management tool to target grazing intensity / desired animal impacts.

The cows looked in good shape with Body Condition Score of 5 to 6. A NUTBAL* (Nutritional Balance Analyzer) sample was taken in February and showed the cows were meeting their nutrient demands. Crude Protein was 6.79%, Digestible Organic matter was 62%, DOM/CP ratio was 9.2, Fecal Nitrogen was 1.34% and Fecal Phosphorus was 0.26%. The cattle get a lot of exercise under this management; they are always in pasture. Sometimes they walk a mile to water. In full disclosure, moving the temporary fence provides exercise for the rancher too. It is walking and stepping in posts every 90 feet or so. Bill has a custom motorized reel to roll in the poly wire, no sweating there, and only takes a couple minutes to reel in a half mile.

March 1, 2017 Old Cows on the Milton Ranch-
Young cows have a total winter feed cost of $1.35 and $1.235 for the old cows.

The costs of winter supplement for the Milton Ranch are planned for 120 days: alfalfa $.50/day/head young cows, alfalfa $.35/day/head old cows, and $.03/day/head barley straw. A prebiotic to aid in the breakdown of digestible fiber is used at $.035/day/head December through March. The opportunity cost of $.82/day/head for grazing at $25/AUM (animal unit month) is also accounted for. The young cows have a total winter cost of $1.35 and $1.235 for the old cows. When comparing to full feed at a rate of $150/ton of alfalfa, the total cost per day would be $2.25/head/day. Grazing with winter supplement is less than half the cost of full feed alfalfa without considering, time, labor, fuel, machinery, including haying equipment and other costs associated with full feed.

This style of management requires a lot of planning as there is constant change with the quality of the vegetation, cattle nutritional needs, and weather. In the spring, it is important to have old grass mixed with new grass to avoid grass tetany. When the grass is short, grazing moves are fast. Throughout the year, the ranch shoots for 20 to 30 acres to be grazed at a time, and has gone as low as 5 acres. An average stock density for the ranch would be 22,500 pounds of cattle per acre. When a storm is forecasted, you think about logistics and make sure you have enough grass on hand so you don't get trapped with a big move. When the cows are calving, you slow down and the pasture size is made bigger. In the heart of calving for 45-50 days or during a tough storm, pasture size increases to 320 acres or more. A later calving date is necessary with this system. For the Milton Ranch, calving starts the end of April. The goal here is to match peak nutritional needs of the cattle to the peak nutritional value of the native forage. The ranch has 75-80% of the cows conceive their first estrus cycle. A bull ration of 35 cows/bull is achieved with this ranch with smaller pasture sizes. Following calving the young cows and old cows are combined as one herd until weaning. The bulls graze with the cow herd through August.

There are a lot of other cost savings with some of the management strategies listed above. The Miltons believe that a Holistic grazing plan offers a more consistent plan of nutrition for the rumen microbes and benefits overall animal performance. The calves are weaned after 6-7 months, but typically by the first week of November. The steers average 460 pounds and heifers 430 pounds. The ranch retains ownership all the way to the rail, so they are less fixated on weaning weights and more focused on the numbers weaned and overall health. The weaned animals that will go to market graze another ranch as yearlings and are grass-fed except for the last 130 days where they are finished in a pasture-feedlot program. This pasture-feedlot includes a bunk fed finishing ration while having access to a large pasture. Live process weights of these animals average 1,150 – 1,200 pounds at 22 months of age.

Below are two awards that Milton Ranch received for Best Carcasses.

*NUTBAL: Nutritional Balance Analyzer
NUTBAL's primary purpose is to provide livestock producers the means to monitor the nutrient concentration in the animal's diet and determine if the current diet is sufficient to meet performance goals set by the producer. Animals receiving good nutrition are better able to resist and overcome disease and other health issues.