NORTH DAKOTA STATE UNIVERSITY

NDSU Extension Service

ND Agricultural Experiment Station

Beef Talk: Cow Size – How Much More Does the Big Cow Eat?

The core issue is what cattle to feed if feed becomes limited.

By Kris Ringwall, Beef Specialist

NDSU Extension Service

Feeding cows can be simple, but also complicated. In simplest form, the cow needs to fill up with grass or some other palatable green forage.

Images

| Daily Intake of Dry Matter Feed | Refer to the sea for Yale Organization | Refer to the sea for S

Feed

The green forage tends to be seasonal, while the grazing of seeds and dry grass is the nongrowing season staple. Regardless of the season, a cow's nutritional requirements need to be met. The challenge is making sure our production expectations are in tune with what Mother Nature provides.

Our pastures and feed piles may be limited as we struggle to balance feed and cattle. When seasons are as now, the lack of rain (or other environmental restraint) highlights the need to plan.

The quick and easy answer is to sell cattle. However, the astute manager does nutritional planning first.

Recently, the Dickinson Research Extension Center sorted cow/calf pairs and two groups (herds) of cattle were sent out for spring and summer grazing. The first herd has 52 cows that average 1,216 pounds (856 to 1,395 pounds) and the second herd has 50 cows that average 1,571 pounds (1,350 to 1,935 pounds).

The 355-pound difference brings up two questions. What is the difference in the nutritional needs of the two herds and is there an advantage of one group over the other during dry weather?

I consulted with animal nutritionists to help explain the difference in nutritional needs of the two herds. Greg Lardy, North Dakota State University Extension beef specialist, and Chip Poland, Dickinson State University Department of Agriculture and Technical Studies chair, responded to the questions.

The core issue is what cattle to feed if feed becomes limited. For ease of understanding, let's discuss how much we would feed these cattle if we removed them from the pasture on June 1 when the calves are approximately 3 months old and fed them until the end of September, a period of four months.

The first group of cattle (averaging 1,216 pounds), with milk production estimated at 20 pounds peak, would have an average daily need of just less than 28 pounds of dry matter of a ration that was 60 percent total digestible nutrients and 9.8 percent crude protein.

The larger set of cattle (averaging 1,571 pounds), with milk production estimated at 20 pounds peak, would have an average daily need of just less than 34.5 pounds of a daily dry matter of the same previously noted ration.

The total dry matter increase for the herd that weighs 355 pounds more on the average would be 6.5 pounds of dry matter (feed) per day per cow, or 780 pounds of feed per cow for the duration (120 days) of the summer confinement period. As the producer, one would need to estimate about 3,360 pounds of dry-matter feed per cow for the smaller cattle and 4,140 pounds of dry- matter feed per cow for the larger cattle.

If each herd has 50 cows, the smaller set of cattle would need 84 tons of dry-matter feed. The larger set of cattle would need 104 tons of the same feed.

Keep in mind that we need to return to Greg and Chip to actually balance the ration and make sure we fine-tune and

http://www.ag.ndsu.edu/news/columns/beeftalk/beef-talk-cow-size-2013-how-much-more-does-the-big-c... 5/16/2008

Beef Talk: Cow Size – How Much More Does the Big Cow Eat? — Ag News from NDSU

Page 2 of 2

match the cattle dietary needs with the actual feed stuffs we have. In addition, we will need to factor in feed waste for the feeding system.

For now, know the weight of your cattle and feed accordingly. If you cannot find 104 tons for the heavy herd, perhaps you better shift gears and keep the lighter cows.

We hope you can find enough feed for them. More later as we look at the grazing options of the two herds.

May you find all your ear tags.

Your comments are always welcome at http://www.BeefTalk.com.

For more information, contact the NDBCIA Office, 1041 State Ave., Dickinson, ND 58601, or go to http://www.CHAPS2000.com on the Internet.

NDSU Agriculture Communication

Source: Kris Ringwall, (701) 483-2348, ext. 103, kris.ringwall@ndsu.edu

Editor: Rich Mattern, (701) 231-6136, richard.mattern@ndsu.edu

-Attachments

🛘 PDF - Daily Intake of Dry Matter Feed 🞑

EPS - Daily Intake of Dry Matter Feed

(bt051508.pdf - 18.50 Kb) (bt051508.eps - 218.24 Kb)