## BeefTalk 777: Grazing Systems are Major Land Resource Areas

A ranch's profitability and sustainability are based on understanding grazing systems.

Every rancher needs to ask three questions: "How many acres does one need?" "What is the stocking rate or carrying capacity of those acres?" and "How many grazing months are available?"

The profitability and sustainability of the ranch are embedded in understanding grazing systems and getting the answers correct. Begin by establishing a goal. Herd expansion or quitting the off-ranch job to focus more on the cattle operation may increase cattle income. But if the increase simply comes as more work or more pressure on the existing ranch land and facilities, a producer is set up for failure.

Goal setting is critical and will help guide our future life decisions in a workable and orderly way. When expanding the cow herd, more questions such as those asked earlier surface.

So how does one go about achieving a goal? Well, if the goal involves ranching, more than likely, pastures and cows soon will need to be discussed. One major challenge is an understanding of the balance needed to meet a goal with the limitations of pastures and cows. The product, more than likely a saleable calf, depends on a grazing system that will maintain a cow and sustain the grass.

The number of calves desired to produce a livable income is directly related to the number of acres required to produce a weaned calf. The number of acres required to produce a weaned calf is directly related to the established stocking rate or carrying capacity of those acres. Finally, the actual stocking rate depends on how many months a producer desires to graze versus feed the calves in drylot.

There is an actual answer to all of the above questions. The answer will be true, based on decades of dedicated people meticulously measuring soil types and associated vegetative growth for each soil type. This database offers producers an extensive understanding of the thorough work by professionals across the world.

As a cattle producer, the major land resources available for calf production have been soil-mapped and classified into ecological sites that have known vegetative production capacity. A producer does not need to drive out to a pasture, climb a hill and gaze at the landscape to estimate productivity of a potential pasture. That work has been done through much of the U.S. and is readily available.

Although the application of these surveys to a particular pasture always needs some confirmation at the point of grazing, producers need to start with what is known, then tweak the grazing plan. Do not start with a wish, then buy cows and turn them out to grass, and by midsummer, wonder where the grass is.

First, locate a range expert through the local county Extension Service office or Natural Resources Conservation Service (NRCS), or visit a neighbor and get his or her advice. The hope is that, through these visits, a producer realizes a lot of work already has been done.

In fact, these large data sets have been used to develop major land resource areas (MLRA). The MLRA combine the knowledge of geology with soil types, historic climate, moisture patterns, vegetative growth and land use. Given the numerous, but identifiable, factors, each combination of soil types, historic climate, moisture patterns, vegetative growth and land use is given a geographic name and identified by a number.

For the Dickinson Research Extension Center, located in Dunn County in southwestern North Dakota, the MLRA is 54. North Dakota has 11 MLRA regions. Get to know these regions for your own location and the locations of your pastures; they are not going to change. The location of your ranch determines your MLRA, not your wish. Sorry.

Given the amount of effort and knowledge that has gone into developing the MLRA classifications, producers have a very good starting point for developing a grazing system. That sounds very

exciting and will provide workable answers to the questions asked.

## **Every Rancher Needs to Ask Three Questions**

- 1. How many acres does one need?
- 2. What is the stocking rate or carrying capacity of those acres?
- 3. How many grazing months are available? Getting the answer correct is critical to the profitability and sustainability of the ranch.

By identifying the MLRA for your ranch, the very first and important step has occurred, based on knowledge. Do you know your MLRA number? If not, discover it.

The second step is determining the ecological sites present in the pasture. These sites also are available through the local NRCS or the Web (http://websoilsurvey.nrcs.usda.gov/). Once each ecological site is identified and quantified, the effect of each ecological site is determined, and an estimated stocking rate in animal unit months per acre or acres per animal unit month can be calculated.

But for today, get to know the MLRA of your ranch. More later.

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.