

Considering the Future of Animal Agriculture – Should it Expand Here?

By Kris Ringwall
Extension Beef Specialist
NDSU Extension Service



As an extension livestock specialist, I have the opportunity to visit with many people from diverse backgrounds. As you might expect, the conversation centers around livestock and one question that pops up is “Should animal agriculture increase?”

There is no right or wrong answer because, I have always assumed, the present production scenarios are a response to long term economic indicators. Recently I left one of these gatherings with the lingering question, “Why do we do what we do?”

For many of us who can recall our individual process of life-long education, we remember key critical points in our upbringing. It may have been the grade on the test or the subsequent parent/teacher conference that started each of us evaluating future direction—and impacting future business/personal/social decisions.

A comment by our parents, relatives or close friends eventually took roots. For instance, my aunts always had the job of stomping wool for the shearers as they were shearing sheep. Not a big job, but they never forgot the ever-present sheep ked (commonly called a tick) and repeated for several decades the shortcoming of one of my favorite livestock industries.

Obviously, comments like those and a multitude of others do influence the minds of the next generation. Our next generation is currently plotting the future of this state and region through their choices. For instance, a third grader I know is already choosing careers which require no math. As a trained data collector, I don’t find her decision very appealing, because, to me, numbers seem to be important in every facet of our lives.

After some discussion and questions, the hoped-for outcome for this third grader was to study math harder and gain an appreciation for the subject. Unfortunately, I failed to perceive the other obvious, and perhaps more creative choice: develop a life and career that requires no math. In this case, the debate has not been settled. Perhaps we can both be more open-minded in future exchanges. Paths can be changed, but it’s difficult as we pass along our biases and attitudes and each new generation cements current directions into history. That’s as true in the livestock industry in North Dakota as it is anywhere else.

The North Dakota Agricultural Statistics Service notes that in 2000 North Dakota had 30,300 farms involving 39.4 million acres, out of a total of 44.2 million acres. About 22.4 million acres were planted to principal crops, 3.2 million acres in the Conservation Reserve program and 2 million acres in summer fallow or preventative plantings. In total, approximately 27.6 million acres is involved in some aspect of crop production.

Included in the principal crops is almost 2.5 million acres of hay production. The net result is approximately 11.8 million acres for other farm production, principally grazing beef and dairy cattle.

Currently, 1,050,000 cows and heifers will use the 11.8 million acres and an estimated 2.5 million acres of government and reservation permit grazing land, or about 13.6 acres per cow for

spring, summer and fall grazing for approximately six months out the year. This translates into a stocking rate of 2.3 acres per animal unit month (AUM). Generalized recommended stocking rates for a 1,200-pound cow for the Drift Prairie region (east) of North Dakota is 1.72 acres, for the Missouri Coteau (central) it is 2 acres and for the West River region it is 2.29 acres.

The hay acreage (2.5 million acres) produced 5.1 million tons of hay in 2000. In the six months of non-grazing, the 1,050,000 cows and 930,000 growing cattle (mostly calves born in the spring) would have available to consume an estimated 2.6 tons per animal. In other words, about 1.3 acres per animal of harvested forage is needed for fall, winter and early spring feeding. Additional grain residue and grain products also are being consumed as a by-product of North Dakota’s grain industry.

So there appears to be sufficient land mass to graze cows as well as the needed forage to over-winter the beef cattle. Yet, the nagging question remains: “Should North Dakota raise more cows?”

Economists have noted the livestock industry is one of the top creators of new wealth within the state. Are we optimizing the utilization of our land area?

Remember the third grader. Generations of third graders made choices as they grew up to get us where we are today. They have collectively partitioned the farmed acreage within North Dakota to 27.6 million acres for crop production and 11.8 million acres for non-principle crop production — beef or dairy production.

If 14.3 million acres (non-crop, government, reservation and hay acres) support 1,050,000 cows and their offspring, a shift of more than 13.6 acres out of crop production would be needed to support every cow added to the inventory. That’s one approach. Another is to learn and implement new management techniques to increase stocking rates, pounds weaned per cow exposed and per acre returns.

Third grade comfort levels and comfort levels in beef cattle production are two different things, but progress for both can be made by breaking out of our comfort zones. Currently, North Dakota’s cow-calf production is limited by how we’ve partitioned our land base, but are there different, more creative ways of looking at that situation? Can we emulate a third grader and look at the future optimistically without our learned biases and ask: Do we continue to do what we do or could we do it better?

May you find all your ear tags.

Your comments are always welcome at www.BeefTalk.com. For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to www.CHAPS2000.COM on the Internet. In correspondence about this column, refer to BT0089.

2000 North Dakota Agriculture Facts

F A C T S	Total ND acres	44.2 million
	Total farm acres	39.4 million
	Total principal crop acres	19.9 million
	(minus hay production acres)	
	Total CRP, summer fallow and idle acres	5.2 million
	Total acres not in principal crop production	11.8 million
	Total hay production acres	2.5 million
Total cows	1,050,000	

Source: N.D. Agricultural Statistics Service