Livestock diversity provides the opportunity for additional revenue.

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The study of chemistry is based on absolutes more than variation.
The study of biology is based on variation more than absolutes.

Sometimes, what we do is absolute, but more often than not, what we do has a varied response.

That is so true in agriculture. Agricultural managers are called upon routinely to evaluate variation and sort out the good and, in some cases, actually seek more, not less, planned variation. And so today, we take a look at diversity.

Diversity is a buzzword today in agriculture: crop rotations, planting sequences, cover crops. All of these elements are part of successful management.

Grasslands, by their evolution, are historically diverse. However, the cows in the pasture have very little visual diversity, which is evidenced by cattle producers' underutilization of additional cattle breeds or types.

Diversity throughout agriculture is a good thing. The crossing of cattle breeds or selected lines of cattle opens a new dimension, a dimension that positively responds to the freshness of increased vigor. That is good.

Just like crop producers are exploring and expanding plant diversity within grain and forage production, so should the beef producer. The livestock producer does not need to stop with simply crossbreeding cattle. I want to go one step further and expand the grassland grazers to cattle and sheep.

Yes, I said cattle and sheep. Diversity of livestock is a healthy approach to livestock production, and that goodness ultimately is expressed in better grass production through enhanced grasslands. Cattle and sheep are an obvious source of diversity within grassland grazers.

The complementary grazing of cattle and sheep is real, not just something to ponder. The Dickinson Research Extension Center determined the biological needs of sheep fit very well with cattle.

In fact, grazing ewes and cattle at the center, one ewe to every cow, complemented the cow herd very well. The cow and ewes, along with their offspring, were able to maintain normal growth without affecting the grasslands.

A very diverse plant population exposed to two types of grazers allows the opportunity for additional revenue per acre above the revenue from simply grazing with cattle. The grass did well, the livestock did well and the producer did well.

But! Yes, this scenario has “buts.” Creating diversity with alternative livestock assumes cows have the luxury
of being the principal, or primary, grazing animal. The cow is not going to be replaced, but reviewing other opportunities for grazing alternative, companion livestock is a good mind-expanding process.

On a recent trip to Mongolia, I observed vast comingled herds of grazing cattle, sheep, goats, yaks, camels and horses on grasslands. Why? The thought is to better utilize the land and available forage that grows on the land.

Obviously, comingling has limits, and once that limit is met, additional grazing or stocking on the grasslands is detrimental. But finding that limit is part of the art and science of livestock production. One thing is for sure: Grazing systems that only utilize one species, such as cattle, leave additional grazing opportunities on the table.

But - yes, another “but” - comingling livestock, such as cattle and sheep, is not easy. The challenges to measuring the bottom dollar in a cattle or sheep operation are difficult to overcome. Nevertheless, let’s move forward.

At the Dickinson Research Extension Center, research suggesting one ewe can be added to the grasslands for every cow that is grazing at no expense to cattle or grasslands is ongoing. Granted, adding sheep to a cattle operation means more work and producer education; however, that does not mean the opportunity is not there.

What about the grass? What about the added dollars if dollars are tight? Currently, the center maintains a flock of White Dorper and St. Croix crossbred hair sheep to graze areas that the cattle will not.

This approach does bring challenges. Like most beef operations, the center is short of labor. Adding a more management-intensive species of livestock, such as sheep, requires considerable thought and planning. Still, the bottom line: When appropriate, adding ewes to make the sheep enterprise significant without decreasing the cow herd makes sense.

For years, the center has utilized sheep for forage management, particularly around the empty cattle pens during the summer. Although the cattle pastures have not been targeted yet, the center has several plant species that could be managed better by multispecies grazing. But first, management hurdles need to be addressed.

Sheep uniqueness also is very real, but diversity is good. The learning curve is steep but doable. But do we want to? “Yes” is the correct answer.

May you find all your ear tags.

For more information, contact your local NDSU Extension Service agent (https://www.ag.ndsu.edu/extension/directory) or Ringwall at the Dickinson Research Extension Center, 1041 State Ave., Dickinson, ND 58601; 701-456-1103; or kris.ringwall@ndsu.edu.