

## Watch Your Animals Graze

I do not mean watch them from your pick-up or watch them from a distance. I mean watch them close. Close enough that you can see what actually goes into their stomachs.

The best time to do that is early in the morning when they first arise to fill their bellies. Ideally, they should be grazing shoulder to shoulder in a line. That is the natural formation for a grazing herd. You will learn the most when they are into good fresh pasture.

Grazing in those conditions seems to put them in a competitive mood. They each want to get their share. That is when you will most accurately learn what they eat and how.

Bison and cattle in a natural setting will eat about 70% herbage (grasses and legumes), 20% forbs (flowering non-grasses) and 10% browse (brush and brushy plants). It is normally stated that bison eat more browse than cattle. I am not sure that is true. In my pastures the two herds appear to eat similarly but that is a different story.

In any case bison and beef can benefit from a wide variety of plants. Not just a variety of grasses. The animals will do best when they have lots of plant choices. They should also have the knowledge of how much of each plant species to eat and when to eat it.

It is well known that plants which many consider weeds have high nutritive value. Common plants like dandelion, alyssum, curly dock, smart weed, white campion, sow thistle and Canada thistle are more nutritious than many grasses. These and numerous other non-grasses are high in digestibility. Many forbs contain high levels of vitamins and minerals. Grazing animals will readily eat these plants at an early stage of growth. As with most plants these are best served before they get too tough or spiny.

Many common plants are listed as toxic or poisonous to livestock. Some of the more common members of that list are nightshade, cocklebur, milkweed, pigweed, Johnsongrass and wild cherry. I do not doubt that these plants are poisonous when eaten at the wrong stage of growth or in excessive quantities.

Nevertheless, I have watched my bison and beef eat all of these in the normal course of grazing without observing any ill effects.

When grazing in a row as described above a typical routine is for the animal to grab several mouths of grass then swing its head over to purposefully bite the top six inches off of a milkweed, take a few more mouths of grass and then two bites of alyssum, take a few more bites of grass and then grab another mouthful of milkweed. It appears that they like variety in their meals as much as we do.

Other plants especially those identified as herbs are known to have medicinal properties. Wormwood, although not a native plant, was believed by the farmers in Germany to be a vermifuge, a dewormer. I do not doubt that it is. It is proven to have antimicrobial properties. I occasionally see cows walk over to a wormwood plant and eat the tender, top half of the plant. I think they are on to something.

There is a plant called cudweed, a pungent member of the everlasting family that in folklore is supposed to help animals get over an upset stomach. My animals seek out and eat cudweed from time to time.

Both bison and cattle are good browsers of brush and woody plants. The situation there is much the same as with forbs. Many brushy plants are high in nutrients. Some are listed as poisonous, but our herds eat them all at different times of the year.

Buckthorn, a recent invasive bush, is a growing nuisance in much of Minnesota. It is not a problem on our farm. In the early fall the larger animals walk the plants down and eat the leaves and berries with delight.

Near the beginning of this essay, I wrote that animals do well if they have choices and knowledge. I have explained some of the choices. The knowledge is herd knowledge. Knowledge of what to eat, when to eat it and how much to eat. For a herd to have this knowledge it must have senior individuals that have lived on the land. Older cows are best. The younger animals are great observers of their elders. If the old cows know, the herd knows.

I should add a few words of caution. Some animals will overindulge. I have seen a heifer eat choke cherries until she died with a stomach plugged with seeds. That was not a toxicity issue but an actual mechanical plugging of the stomach chamber. I once had a steer that ate himself sick every time he could find pine needles. I have had a single animal in the herd get sick each time I rotated the herd through a particular pasture. I never did figure out what she was obsessing on. I just took her permanently out of the rotation. Some plants can cause quick neurological problems. Some cause fatal liver failure. There can be problems. The problems should be rare if both you and your animals have knowledge of what is growing in your pastures.

There is a group at the Utah State University Extension Service that does great research into grazing issues such as these. If you wish, you can follow the link below to their website and sign up for the BEHAVE Research and Outreach Newsletter.

<http://extension.usu.edu/>

Best Regards, Tom Barthel  
Secretary and Director at Large