

Is Cheatgrass of any Nutritional Value?

Dr. L. Ben Bruce

Nevada Cooperative Extension, College of Agriculture, Biotechnology and Natural Resources

At the UNR Gund Ranch, we have been doing some preliminary work on using cattle grazing to create firebreaks. This involves primarily fall and winter grazing of dormant cheatgrass. That brought up some questions about its nutritional value and what type of cattle to use to graze it.

Some lab work and a literature scan show some interesting things about the nutritional value of cheatgrass. First off, it is not all that much different than many of the native species occurring on our rangelands. Laboratory analysis of samples of Great Basin wildrye and cheatgrass taken in October at the Gund ranch show that both plants contained about 3 percent crude protein. The wildrye had slightly less energy than cheatgrass.

Michael McMinnis and Martin Vavra published a paper in the Journal of Range Management in 1987 (JRM 40:60) that gave values for crude protein and acid detergent fiber (ADF) for cheatgrass, bluebunch wheatgrass, Sandberg's bluegrass, needlegrass and bottlebrush squirreltail over time. Keep in mind that ADF values are inversely related to energy, so lower values mean more energy and lower values are desired.

Fall samples of these plants showed a range of 3% protein to 6% protein. Cheatgrass was the low sample at 3%, but wasn't much lower than bluebunch or Sandberg's bluegrass. The ADF ranged from 57% to 51%. The 51% has the most energy, which was Sandberg's bluegrass. Cheatgrass was not the worst, and was very close to the highest energy value at 52%. The one with the least energy was squirreltail.

The Gund Ranch values for fall cheatgrass were better with 3.5% protein and 48% ADF. Wheat straw is 3.5% protein and 54% ADF. Cheatgrass is the much better energy source. I think what this means is that standing fall dormant cheatgrass does have some feed value. Definitely not the stuff you want replacement heifers on or late pregnancy cows, but might be useful in second trimester or for other animals that don't have a high nutrient demand.

There is still a lot to learn about late grazing cheatgrass, but it appears that protein supplementation is going to be necessary. Compared to native plants, cheatgrass tends to be lower in protein, but not bad relative to other dormant plants in energy.

