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Small Grain Cereals for Pasture

Forage quality has rapidly declined following the heat of August and the lack of widespread rainfall so far in September. The recent rains have made me more hopeful that cereal grains could be utilized for livestock grazing this fall, winter and into early spring. District Crops and Soils Agent, David Hallauer is writing a companion piece for establishing and feeding cereals (<https://www.meadowlark.k-state.edu/crops-soils/>) news columns are on the bottom of the page, my focus today will be on the grazing aspect of these crops.

Producers needing forage this year may want to consider planting a small grain cereal crop for forage this fall. There are five main small grain cereals that can be used as forage crops in Kansas: winter or spring wheat, winter or spring barley, spring oats, rye, and winter or spring triticale. Of these, winter wheat is the best all-purpose winter forage, but each of the other options has advantages and disadvantages.

Focusing on fall/winter/early spring pasture, generally rye has the highest total season-long production, followed by triticale, wheat, and barley. Spring oats can be pastured, but the total length of grazing is limited because they will winter kill out, so should be considered a short term option in either fall or spring. Rye becomes stemmy and unpalatable earlier in the spring than other cereals. Since rye is less palatable and higher in fiber than wheat or barley, gains during grazing are normally greater on wheat, triticale, and barley pasture than on rye

Barley produces palatable growth rapidly in the fall under favorable conditions. It is considered superior to other cereals for fall and early winter pasture, but wheat, triticale, and rye provide better late winter and spring grazing. Wheat usually produces most of its forage in late fall and early winter, and again in the spring. Triticale falls in between rye and wheat in its period of peak production. If a producer wishes to extend the grazing season as long as possible in the spring, triticale is the best option.

In terms of overall forage quality of pasture, barley is highest, followed by wheat, triticale, and rye. During the fall and early spring periods of peak production, the crude protein content of small grain pasture is normally about 20-25 percent. Growing cattle require about 12 percent crude protein, thus no protein supplements are necessary. Spring oats for grazing should be planted as early as possible. The quality of oat pasture is very high.

Stocking rates must be adjusted to match the crop's production potential. Under good growing conditions, a well-fertilized small grain dryland pasture can carry about 500 pounds of cattle per acre. Under poor growing conditions, stocking rates should be reduced considerably. Cattle gains of 1.5 to 2.5 or more pounds per acre per day are possible during periods of good production. With irrigation and intensive management, higher stocking rates can be attained. Fall grazing management is critical to the success of small grain pastures. Begin grazing when the plants are well rooted and tillered, usually about 6 to 8 weeks after planting. If the foliage is too tall when the animals are introduced, or if the crop is overgrazed, the plants will be more susceptible to winterkill. Make sure some green leaves remain below the grazing level. The minimum stubble height should be about 3-4 inches. Rye has a more upright growth pattern than most wheat varieties, so it should not be grazed as low. Barley and triticale are more susceptible to winterkill than rye or wheat.

Small grain pastures can cause bloat. Daily supplementation with poloxalene (Bloat Guard) is highly effective in reducing bloat. Feeding high-quality grass hay, silage, and/or an ionophore such as Rumensin or Bovatec can also provide some protection against bloat. Mineral supplements containing magnesium are necessary when grazing cattle on small grain pasture to minimize the occurrence of grass tetany.