

## Early Intensive Grazing to Control Kentucky Bluegrass

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The idea that pasture composition can be influenced by early intensive grazing is by no means new. One of the first research projects to look specifically at Kentucky bluegrass control with early intensive grazing was conducted in Kansas in the mid-1970s.

However, differences in climate among areas can influence results; therefore, evaluation of these practices in North Dakota is needed prior to making recommendations. The research objective is to determine if early intensive grazing can be used to control Kentucky bluegrass (*Poa pratensis* L.), an invasive grass species.

Six pastures (40 acres each) were assigned to one of two treatments: early intensive grazing (EIG) or season-long grazing. On the season-long treatment, cattle were placed on each pasture in mid-May and removed in mid-September with the objective of grazing at a moderate stocking rate (approximately 1.5 animal unit month/ac).

To accomplish the early intensive grazing, two and a half times the normal number of cattle were stocked in each pasture as early as possible after Kentucky bluegrass greened up. The cattle were removed when 30% of the native species had received some grazing.

The objective of early intensive grazing is to achieve similar grazing pressure as on the season-long pastures but in a shorter period of time. In this case, cattle were placed on EIG pastures as early as April 13.

During the two years of this project, aerial cover and frequency of Kentucky bluegrass declined on the early intensive treatment, while aerial cover on the season-long treatment increased.

Changes in other plant species also were observed. Density of meadow anemone (*Anemone canadensis* L.) increased on the season-long pastures. Buckbrush (*Symphoricarpos occidentalis* Hook.) frequency decreased with early intensive grazing. The density of common dandelion (*Taraxacum officinale* F.H. Wigg.) decreased on early intensive and increased on season-long pastures.

Kentucky bluegrass begins growth early in the spring, and early grazing appears as though it may reduce its abundance in the plant community and improve growing conditions for other grasses and forbs. However, multiple years of early intensive grazing may be required to change the fundamental plant species composition under the conditions observed in our study.

At this early stage in the project, Kentucky bluegrass still makes up a majority of the plant community. Producers interested in implementing this type of grazing system should contact the authors of this article for further recommendations.