

## Defining the grazing season of restored natural grasslands

**Abstract:** Grazing native plants is common in the western United States, but the limited amounts of grazing land in Iowa are dominated by exotic, cool-season grasses and legumes. This study explored the nutritional quality and yields of reconstructed native plant grassland and prairies.

### Investigators:

**Chris Troendle**  
Whiterock Conservancy  
Coon Rapids

(**Tolif Hunt**, formerly of  
Whiterock Conservancy)

**Mary Wiedenhoef**  
Agronomy  
Iowa State University

*Can grazing and conservation land management be mutually beneficial? Yes, grazing and land management can be employed to create successful land use management plans that incorporate both conservation and grazing goals.*

### What was done and why?

Grazing cattle on reconstructed prairies is a solution proposed by land managers and grazers in Iowa to the problem of meeting multiple conservation goals. It allows for incorporating perennial, native plants into the Iowa landscape while maintaining the productivity and profitability of the state's agricultural lands.

The objectives were to collect and analyze the forage value of the vegetative component of a reconstructed species-diverse prairie, restored oak savanna and lower diversity warm-season reconstructed prairie across two growing seasons. The information would be used to build a "calendar" that tracks the progression of biomass availability and forage value of the three non-pasture habitat types. The project team sought to understand the nutritional quality and forage quantity of these habitats, and how it changes during the growing season. This will allow producers to better integrate cattle grazing into ecological management of these areas.

### What did we learn?

Though prairie grazing is not likely to become a highly profitable venture in Iowa due to lower quality forage resources, this case study suggested that it is possible to maintain economic viability while maintaining or improving ecosystem services. The results have the potential to help both conservation land management and grazers. Conservation lands may be improved by increased diversity and newly altered disturbance regimes. Graziers may benefit by saving money from decreased need to purchase hay, expansion of land base for grazing, and providing time for home pastures to rest while grazing prairie lands.

Graziers and conservation land managers may have different approaches to grazing prairies. Graziers may be more focused on improved cattle body conditioning scores or weight gain. Conservation land managers may be more interested in added diversity and enhanced wildlife habitat. If grazing is implemented as a land management strategy, it will be critical to have considerable early communication between conservation managers and graziers to avoid overgrazing of prairies and compromising of conservation goals or resulting negative impacts on cattle health.



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