**THE ROLE OF FORB SEEDING RATE IN ENHANCING FLORISTIC DIVERSITY IN PRAIRIE RECONSTRUCTIONS**

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*Abstract:* Although creating floristic and habitat diversity are central goals of prairie reconstruction, numerous studies show that most reconstructions fail to match the diversity of remnants. Equipping restorationists with a better understanding of basic planting variables, such as seed mix composition, seeding rates, and planting times, would enhance the ability to create more authentic and diverse plantings, particularly given the widespread impact of certain planting practices, such as those promoted through the Conservation Reserve Program (CRP). This study examined the effects of seeding rate, grass to forb ratio, and planting time on floristic diversity in 144 reconstruction plots planted in full factorial design. Despite planting of equal numbers of species in all plots, diversity increased with absolute forb seeding rate and with increased proportions of forb seeds relative to grass seeds. Diversity positively correlated with total and forb seeding rates but not with grass seeding rate, indicating that forb seeding rate is a key driver of diversity, explaining 32% of the variation in diversity values. Native plant density and richness showed similar trends which also linked increased forb rates to suppression of weed growth. In this study diversity, native plant density, and weed suppression were all enhanced by planting at a rate of at least 430 seeds/$m^2$ with forbs comprising greater than 50% of the seeds (by number). These results contradict the common practice of planting high rates of native grass seed with minor portions of forb seed when high native diversity, density and weed suppression are goals.