

FLORISTIC QUALITY ASSESSMENT OF 15 PRAIRIE RECONSTRUCTIONS AND 3 NATIVE PRAIRIES IN INDIANA

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Abstract: The earliest prairie reconstructions in Indiana were installed in the 1980's. Today several dozen have been completed by state agencies, landtrusts, and educational institutions and prairie plantings are becoming commercialized. Most reconstructions are used in areas of intensive agriculture to buffer core nature preserve. Reconstruction efforts in metro parks, rights-of-way, schools, and private land have been few in number, often lack appropriate management strategies, or seem ill informed as to what represents a "good" versus "poor" reconstruction. Our project goals are: 1) to develop a historical narrative of prairie reconstruction/restoration in Indiana; 2) to create an inventory of sites with information on salient features and management; and 3) to quantify the success of Indiana's prairie reconstructions by means of standardized Floristic Quality Assessment (FQA). This poster presents preliminary FQA results based upon 15 reconstruction sites and 3 native prairies. Basic sampling protocol consisted of 20 0.25 m² quadrats placed along a transect at 5 m intervals. Sites with apparent vegetation differences were sampled with additional transects. Preliminary results indicate that lowest quality reconstructions were no better than old-field communities of the same age. However, several sites had species richness, mean C, and FQI near those of managed native prairies. Low quality reconstructions characteristically had familiar problems with the initial seed mix (low forb richness and/or high proportion of tall grass species) and poor fire management (i.e., fire of low frequency or without seasonal variation). Landtrust organizations established the highest quality reconstructions observed. Sampling of additional reconstructions and native prairies are on-going.