

Wetland plant management: the importance of soil textural diversity in selecting management strategies for plant structure and food production.

Leigh H. Fredrickson and Mickey E. Heitmeyer
Gaylord Memorial Laboratory
University of Missouri-Columbia
Puxico, MO

Historically wetland management actions were based on the potential for using a specific technique (e.g., discing, mowing, flooding) on a site because the infrastructure was suitable, appropriate equipment was available, or there were personnel or funds for implementation. Unfortunately wetland managers consistently failed to implement water-level management and tillage strategies in relationship to how these manipulations influenced the abiotic conditions that control plant germination, growth, and seed or propagule production. Thus, identifying whether the application or timing of a manipulation was appropriate to create the ideal conditions of soil moisture, soil temperature, light, or chemistry to stimulate germination or growth was superficial. We provide examples of how information on soils in specific wetland management units and sites is critical in developing good habitat management objectives and creating desirable habitat structure and food production for wildlife on intensively managed sites.