Ecological site classification system for wetland forests of northern Wisconsin

John Kotar¹*, Colleen Matula²

¹ University of Wisconsin–Madison, Emeritus
² Wisconsin Department of Natural Resources

A site classification system for upland forests, based on floristic composition (forest habitat types), has been available to natural resource managers in Wisconsin for many years. A similar system has recently been completed for wetland forests of Northern Wisconsin. In its application the system uses dichotomous keys on plant species present, to identify site types. The types are depicted on graphs as clusters of sample plots ordinated along the soil moisture and available nutrient axes. Ecological interpretations and management implications for individual types are provided. The system offers a tool for evaluating and categorizing successes and failures of common management practices in wetland communities, up till now categorized simply as “swamp conifers” and “swamp hardwoods”. The system also shows promise for prioritizing and directing management activities in wetland forests in light of rapidly advancing threat of emerald ash borer infestation and other forest health threats. This new tool will be available online for forest managers to use in making management decisions.

*Presenting Author: jkotar@wisc.edu