

## ABSTRACT

**THESIS:** Evaluation of Restored Wetlands Using the Ohio Rapid  
Assessment Method

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The history of wetland regulation, identification, and delineation was researched to examine the current status of wetland assessment. One area of interest was the Natural Resources Conservation Service (NRCS) programs to construct and restore wetlands on previously farmed land. Indices of biotic integrity and other intensive assessment methods such as Floristic Quality Assessments are frequently used to document condition and quality for both natural and constructed wetlands. This research used the Ohio Rapid Assessment Method (ORAM) to evaluate five NRCS wetlands of different ages and an undisturbed natural wetland for comparison. In addition, an intensive vegetative survey was conducted at each wetland to determine the characteristics of the plant community and to create a Vegetation Index of Biotic Integrity (VIBI) based on the Ohio wetland assessment program. The goals of the research were to document the condition of the wetlands, to evaluate the use of the rapid assessment method compared to the more extensive vegetative assessments, and to examine the vegetative composition of the

wetlands as a function of age since establishment under the NRCS programs. Scores determined by the ORAM and the VIBI demonstrated a close correlation. ORAM scores also correlated to Floristic Quality Assessment Index scores calculated as part of the VIBI. Scores calculated by the ORAM and VIBI were regressed against the age of the wetland. These assessment scores were not significantly related to age, however lack of significance might have been constrained by the small number of samples. This research demonstrated that the rapid assessment technique used provided results comparable to more intensive methods and could provide a relatively quick and accessible method to monitor wetland condition and development.