
**COMPARISON OF LANDSCAPE AND VEGETATION
METRICS BETWEEN WETLANDS IN THE
NORTHERN GREAT LAKES REGION AND
HIGH ELEVATION CENTRAL APPALACHIAN WETLANDS**

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ABSTRACT

I surveyed 58 wetlands in northern Wisconsin and Michigan's Upper Peninsula to examine patterns in vegetation community composition. In a principal components analysis of genera-weighted values, riverine sites were distinctly different from lacustrine and palustrine sites. Site loadings of the first principal component were correlated with site pH and a weighted site index of wetland plants. Similarity among wetlands was not influenced by distance among sites, and relative species richness was not influenced by wetland area. I then compared these northern wetland results to identical vegetation surveys of 20 high elevation wetlands in northern West Virginia and western Maryland, using plant community measures as relative disturbance indicators. Comparisons of the two regions indicated that more wetland-obligate and -facultative species were present in the northern wetlands than in relicts further south, and that relative species richness of non-woody species was higher in northern wetlands. Vegetation disturbance indicators, though relatively higher in northern wetlands than in central Appalachian relicts, revealed markedly low disturbance measures in both regions. The minimal levels of disturbance indicate the potential use of both regional sets of wetlands as baseline data for future disturbance studies.

KEY WORDS: boreal wetland, disturbance, metric, relict wetland