

EaGLE Symposium on Coastal Wetland Vegetation

Atlantic Coast and Great Lakes EaGLEs researchers gave presentations July 1 at a special symposium of the 17th Annual Meeting of the Society for Conservation Biology.

Organized by Carol Johnston and Joy Zedler of the Great Lakes Environmental Indicators Project, the symposium was on “Coastal Wetland Vegetation as a Harbinger of Environmental Change.” The goals of the symposium were:

- (1) To examine responses of coastal wetland plants and plant assemblages to environmental stress
- (2) To present examples of plant indicators of coastal wetland condition at field to landscape scales
- (3) To explore commonalities and differences between saltwater and freshwater coastal wetlands with respect to vegetation biodiversity and response to environmental stress.

Presentations focused on wetland plant research being conducted by three EaGLE centers: Atlantic Coast Environmental Indicators Consortium (ACE INC), Atlantic Slope Consortium (ASC), and the Great Lakes Environmental Indicators Project (GLEI). Mark Brinson (ASC) and co-author Richard Rheinhardt used data from two important landscape features of the southeastern coastal plain, riparian forests along headwater streams and wet pine savannas, to show how vegetation can be used in different ways as indicators of environmental quality. Dennis Whigham, also with ASC, and co-authors Mary Leck and Ryan King talked about plant species diversity in tidal freshwater and tidal brackish wetlands of the Mid-Atlantic coast. James Morris (ACE INC) used data from a salt marsh at North Inlet SC to illustrate how interactions among sea level, primary production, tidal range, and sediment accretion control wetland stability relative to sea level rise. A GLEI team consisting of Carol Johnston, Paul Meysembourg, and Tom Hollenhorst described GIS-derived indicators of environmental stressors and ecosystem responses of Great Lakes coastal wetlands, focusing on the utility of National Wetlands Inventory data. Christin Frieswyk (GLEI) gave a talk entitled “Many Types of Dominance,” about plants that exert the most influence or control over a wetland vegetation community. The presentations followed a plenary speech by Joy Zedler on wetland restoration, which also advertised the GLEI study.



Symposium presenters (L to R): Christin Frieswyk, Mary Leck, Dennis Whigham, Joy Zedler, Mark Brinson, James Morris, Carol Johnston.