



Natural History Field Seminars, Workshops, and Courses at Eagle Hill on the Eastern Maine Coast

Salt Marsh Ecology and Monitoring

July 29 – August 4, 2012

Ecosystem services range from the beautiful (aesthetics) to pragmatic (fisheries support and shoreline protection). This workshop provides hands-on use of different functional assessment tools to evaluate a variety of ecosystem services provided by natural, impaired and restored salt marshes. We will compare and contrast a variety of intensive and rapid assessment methods. Workshop techniques can and should be applied in planning, habitat management and restoration projects. This seminar is comprised of 5 intensive days combining field and classroom/lab instruction. Participants are encouraged to bring their own case studies.

The course will be presented in lecture, discussion, and field excursion formats. Classroom material will review salt marsh ecology with a focus on ecosystem services, processes that maintain them and expected changes in climate to provide a foundation to develop new ideas and conceptual modeling for salt marsh restoration. Case studies will examine hydrologic alterations, invasive species, barriers to upslope migration and fish and wildlife habitat value. Field trips will focus on sampling methods needed to assess ecosystem services in natural, impaired and restored salt marshes. Accepted restoration techniques will be reviewed and new ones considered and evaluated using conceptual models. Local sites will be used as case studies whenever possible although due to the nature of the course, other sites will be incorporated as well. A substantial portion of most days will be spent in the field. This course is offered for those who have some background or experience in ecology.

Dr. Susan C. Adamowicz is the Land Management Research and Demonstration Biologist of the US Fish and Wildlife Service stationed at the Rachel Carson National Wildlife Refuge in Wells, Maine. With over 20 years' experience in wetland regulation and restoration, her current work focuses on innovative methods to control invasive plants and salt marsh restoration in light of global climate change.

Dr. David Burdick is Research Associate Professor in the Department of Natural Resources at the University of New Hampshire where he has taught wetlands courses over the past 14 years. For 25 years he has studied coastal habitats, primarily salt marsh and seagrass beds, assessing human impacts and habitat restoration. He has edited a new book on tidal restoration with Charles Roman to be published in 2012.

