



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

# Taxonomy and Biology of Ferns and Lycophytes, with Guest Lectures on Isoetes

August 22 - 28, 2011

This course covers the identification, phylogeny, and ecology of ferns and lycophytes. Morning lectures will review the major families and place these in a phylogenetic context. The afternoon field trips will emphasize identification and ecology of local genera and species. The course will visit several habitat types along and near the eastern Maine coast to see as many species as possible. Herbarium specimens of northeastern species not found locally will be available for study. Besides identification, we will discuss the distinctive biology of ferns, such as their life cycle, hybridization, polyploidy, unusual adaptations (iridescent ferns, ant ferns, apogamy), biogeography, and uses of ferns by people. We will also discuss the sweeping changes that have taken place over the past ten years in understanding the phylogeny of ferns and lycophytes (for instance, why the term “fern allies” is no longer valid). This year Dr. W. Carl Taylor will be joining the seminar. Among topics he will discuss, will be the biology and identification of quillworts (Isoetes), a group in which he is a world expert. Plan to get your feet wet and consider bringing challenging specimens.

Dr. Robbin Moran ([rmoran@nybg.org](mailto:rmoran@nybg.org)) is Curator of Ferns at The New York Botanical Garden. He has published four books and over 80 scientific papers on ferns. With Alice Tryon, he has written the *Ferns and Allied Plants of New England* (1997) and with Barbara Joe Hoshizaki, the *Fern Grower's Manual* (2001). He published *A Natural History of Ferns* (2004), which covers many aspects of fern biology and will be used as a text for the course. Robbin has traveled widely in Latin America and taught fern courses in Costa Rica, Venezuela, Ecuador, and Bolivia. During summers he co-teaches *Tropical Plant Systematics*, a five-week long course for in Costa Rica sponsored by the Organization for Tropical Studies.

Dr. W. Carl Taylor ([wcarl.taylor@gmail.com](mailto:wcarl.taylor@gmail.com)) is a retired museum curator of botany. Currently, he is a Research Associate at the Smithsonian Institution in Washington, DC. As a boy, Carl became interested in ferns through Boughton Cobb's *Ferns and Fern Allies* and its wonderful illustrations by Laura Louise Foster. He served as Secretary of the American Fern Society for many years and published many papers in the *American Fern Journal*. Most of his articles are about Quillworts (Isoetes), a curious lycophyte that looks like a tuft of grass. Carl has adventured far and wide by car, boat, helicopter, and even horseback in search of his beloved Quillworts. He is the author of *Arkansas Ferns and Fern Allies*.

