



FERNS AND LYCOPHYTES: IDENTIFICATION, BIOLOGY, AND NATURAL HISTORY



2025 EAGLE HILL
NATURAL HISTORY
SCIENCE SEMINARS
ON THE COAST OF
EASTERN MAINE

**Instructors: Dr. Robbin Moran, Dr. Alejandra Vasco,
& Dr. Weston Testo**

When: August 17-23, 2025



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the past ten years in understanding the phylogeny of ferns and lycophytes (for instance, why the term “fern allies” is no longer valid). We see a lot of quillworts (*Isoetes*) during the course, so plan to get your feet wet and consider bringing challenging specimens.

[GENERAL INFO](#)

[CALENDAR](#)

[APPLY](#)



about the instructors

Dr. Robbin Moran (rmoran@nybg.org) is Curator Emeritus at The New York Botanical Garden. He has published four books and over 200 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. Alejandra Vasco (avascog@gmail.com) is a Research Botanist and Fern Curator at the Botanical Research Institute of Texas, USA. Alejandra obtained her BSc from the University of Antioquia, in her native Colombia, and her PhD through the joint program between the City University of New York and the New York Botanical Garden. Her research focuses on the taxonomy and systematics of ferns in the American Tropics, as well as the development and evolution of leaves in ferns. Alejandra has participated in three previous editions of the fern course at Eagle Hill and regularly teaches field courses on ferns in Colombia, Costa Rica, and Brazil.

Dr. Weston Testo (wtesto@uvm.edu) is an Assistant Professor at the University of Vermont at Burlington and Director of the Pringle Herbarium. Wes received his Ph.D. from the University of Vermont and subsequently worked at the University of Florida, Gothenburg University, and the Field Museum of Natural History before returning to the University of Vermont as faculty in 2023. His research interests range from taxonomy and systematics to phylogenomics and ecological modeling, with a focus on ferns and lycophytes in the American tropics. He has carried out fieldwork in 12 countries in the American tropics and has taught fern courses in the United States and several countries in Latin America.