

Professor Jon Shaw, Ph.D.
Duke University

Thursday, January 27
1:00 pm
Building 1505 Room 189 (Ocoee Conference Room)

Contacts: Rich Norby and Dave Weston

Phylogeny and evolution of peatmosses (*Sphagnum*)

The research program of Jon Shaw (Ph.D., University of Michigan, 1983) centers on the evolution and diversity of bryophytes. His particular focus is the genus *Sphagnum* (peatmosses). Ongoing research is grounded in phylogenetic analyses at various levels of biological organization from populations up to genus-wide. He utilizes DNA sequence data from the nuclear, chloroplast, and mitochondrial genomes to infer historical processes of biodiversification. He has a special interest in the genetic structure of both rare and widespread species. Morphological and molecular information is being used to explore geographic patterns in phylogenetic diversity within the peatmosses. Of particular interest are biogeographic relationships between boreal, tropical, and Southern Hemisphere taxa, and between New and Old World taxa. His group's data base presently includes nucleotide sequences from multiple loci representing some 500-600 accessions of peatmosses. He also serves as a Curator of bryophyte collection of Duke University Herbarium, which includes approximately 230,000 collections of mosses, liverworts, and hornworts. The collections represent a central resource for bryological research at Duke, where they are actively integrating molecular investigations with field work and collections- based approaches.