

**New England Botanical Club – Minutes of the 976<sup>th</sup> Meeting**  
**1 March 2002    Arthur V. Gilman, Recording Secretary *pro tempore***

The 749<sup>th</sup> meeting of the New England Botanical Club, being the 976<sup>th</sup> since its original organization, met on Friday, March 1, 2002, in the Lecture Hall of the Fairchild (Biochemistry) Building, Harvard University, Cambridge, MA, with 54 members and guests present.

The annual business meeting of the New England Botanical Club was presided over by outgoing President **Lisa Standley**, including reports from Officers, Curators, and Committee Chairs, and Election of Officers. **Nancy Reid**, Curator of Nonvascular Plants, reported that integration of the NEBC collections into the Farlow Herbarium was proceeding, with 2427 packets of mosses inserted during the past year. **Ray Angelo**, Curator of Vascular Plants, reported that integration of the NEBC collections into the general Gray Herbarium collections was proceeding slowly and that due to lack of personnel, no progress had been made during the past year. With 201 new collections added during the past year, the Club Herbarium now holds 252,948 sheets. **Art Gilman** reported on Field Trips of the past year, including trips to Cambridge's Mt. Auburn cemetery in May, to Pownal, Vermont, and White Creek, New York, in June, and to Falmouth and Hyannis, Massachusetts, in September. **Pat Swain**, Chair of the Graduate Student Award Committee, reported that three awards were given in 2001, totaling \$2000. These were to Valerie Reeb for research on Acarasporeaceae, a family of lichenizing acymoyetes including travel to Maine to collect material for study; to Michael Moody for research on New England species of *Myriophyllum*; and to R. Williams for research on *Pycnanthemum* in eastern North America. Treasurer **Harold Brotzman** reported that Club finances were in good order; an audit is anticipated in the near future prior to April 15 tax reporting. **Karen Searcy**, Chair of the Special Publications Committee, noted that no new Special Publications have been undertaken in the past year; however, hard copies and CD's of the first publication, Dr. Robert Bertin's *Flora of the City of Worcester*, are still available. **Les Mehrhoff**, Librarian, reported that one new book has been added to the Club library, Irwin Brodo's recent *Lichens of North America*. Les also reported as Chair that the newly established Fernald Award Committee will meet following the publication of Volume 104 of *Rhodora* to consider papers in that volume for the first Fernald Award.

The Nominating Committee Chair, **C. Barre Hellquist**, presented the following slate of nominees for officers for the ensuing year:

President	Paul Somers	Curator of Non-Vascular Plants	
Vice President	Arthur V. Gilman		Anna M. (Nancy) Reid
Treasurer	Harold Brotzman	Librarian	Leslie J. Mehrhoff
Corresponding Sec.	Nancy M. Eyster-Smith	Councilor for a term of 1 year	Judy Warnement
Recording Secretary	Neal W. Anderson	Councilor for a term of 3 years	Kanchi Ghandi
Curator of Vascular Plants	Raymond Angelo	Student Councilor	Jennifer Forman
Asst. Curator of Vascular Plants	Erika Sonder		

The motion was made and seconded that the Chair cast one ballot for the nominated slate, so moved by a voice vote.

Outgoing President **Lisa Standley** then briefly reviewed her tenure, considering three accomplishments in particular: the establishment of the Special Publications Committee with its publication of the first Special Publication, the 25-year Index to *Rhodora*, and the field trip to the Gaspé Peninsula in 2000.

She especially thanked several officers of the club for outstanding efforts, particularly Ray Angelo, Harold Brotzman, Nancy Eyster-Smith, and Karen Searcy. Lisa then passed the ceremonial gavel to Incoming President Paul Somers, who noted that the April meeting would feature Distinguished Speaker Dr.

Ted A. Barkley of the Botanical Research Institute of Texas (BRIT), who will speak on revisions to the systematics of the Asteraceae, *sensu latissimo*.

Incoming President Paul Somers introduced the evening's speaker, Outgoing President Dr. Lisa A. Standley. Lisa first became interested in nature as a child attending Massachusetts Audubon Society Day Camp programs. Although a premier interest in birds led her to matriculate at Cornell University, she was soon introduced to botany there by Dr. R. T. Clausen. She received a Master's degree from Cornell, her thesis being on the systematics of *Carex* sect. *Cryptocarpeae* (*C. crinita* and *C. gynandra*). She then received a Ph.D. from the University of Washington where she studied under Dr. Melinda Denton. Her doctoral thesis on *Carex* sect. *Acutae* (now better known as sect. *Phacocystis*) in the Pacific Northwest was published in the series *Systematic Botany Monographs* by the American Society of Plant Taxonomists. It is still the best-selling volume in the series. Following receipt of her doctorate, Dr. Standley taught at Wellesley College for several years before leaving academia to become a consultant with the firm of Vanasse Hangen Brustlin in Watertown, Massachusetts.

Lisa's talk, entitled "Botanizing in the Extremes," grew out of several visits over the past decade to two outstanding natural areas, the Anza-Borrego Desert State Park (ca. 800 square miles) in the Sonoran Desert of southern California and the Arctic National Wildlife Refuge (ca. 28,000 square miles) in northeastern Alaska. Both refuges present extreme environments that are challenging to plants. Ranging back and forth between the two, however, shows that they are similar in some important ways.

California's Anza-Borrego Desert State Park is a harsh desert environment where extremes of heat and drought strongly control plant communities, and plants exhibit many adaptations to cope with the problems. The flora is strongly controlled by microhabitat, from cacti (species of *Mammillaria* and *Opuntia*) on parched rocky slopes to maidenhair fern (*Adiantum capillus-veneris*) near a surprisingly permanent waterfall, named appropriately "Maidenhair Falls." Although the dryness and heat control plant distributions, some mesophytes such as desert palm (*Washingtonia filifera*), ash (*Fraxinus*), and sycamore (*Platanus*) occur in a few protected seeps and along the bottoms of moist ravines. The palms do not appear to be reproducing well at present and studies are underway to better understand the reason.

When in bloom in early spring, desert flats are extremely lush with a wide array of very showy flowers. In years when it rains, every inch of the flats has something in bloom, including species of *Folisma*, known as "fiesta flower," *Justicia*, *Penstemon*, *Mimulus*, *Phacelia*, and *Abronia*. Composites are abundant, as are the legumes *Oxytropis* and *Astragalus*. Desert poppies (*Argemone*) and *Sphaeralcea* add bright flowers in abundance. Large specimens of *Agave* and *Yucca* are common.

Anza-Borrego is characterized by sedimentary bedrock but there are numerous granite outcrops and badlands. Dry-adapted shrubs such as creosote bush (*Larrea*), smoke-bush (*Dalea*), and mesquite (*Prosopis*) characterize large areas, as do ocotillo (*Fouquieria*) and junipers (*Juniperus*).

The plant communities of the Arctic National Wildlife Refuge have a comparable diversity, even though they occur at a high latitude and endure bitterly cold winters. Shrubby species are lacking except for a few patches of willows (*Salix*) in protected east-west valleys; down-sloping winds in the north-south valleys appear to be inimical to any woody growth other than ground-hugging species of willow (*Salix minima*) and the ubiquitous dryas (*Dryas octopetala* and *D. integrifolia*). In mid-June, the Arctic meadows are filled with spectacular wild flowers in a show comparable to the spring extravaganza of the Anza-Borrego Desert State Park. There are meadows of poppies, buttercups, anemones, and lupines, and rocky uplands are characterized by "little rock gardens" with such bright flowers as purple mountain-saxifrage (*Saxifraga oppositifolia*), phlox (*Phlox sibirica*), and groundsels (*Senecio* spp.). Legumes, including the same genera found at Anza-Borrego, *Oxytropis* and *Astragalus*, are abundant. There are numerous brightly-flowered species of lousewort (*Pedicularis* spp.). Grand views of towering mountains and broad river valleys open onto the broad coastal plain and distant views of the Beaufort Sea ice pack.

Both sites have abundant wildlife. In the Sonoran Desert, the fauna is characterized by reptiles, including tortoises, rattlesnakes, and iguanas. The Arctic ecosystem features large herds of caribou, along with ermine, grizzly bears, and muskox, aptly described by Lisa as "fringed sofas on legs." Birds of the desert are few but

include roadrunner (*Paenopepla*) and several species of hummingbird. In the Arctic, birds are abundant and readily observed, from gyrfalcons to long-tailed ducks to red phalaropes.

The two locales are alike in the fragility of their ecosystems, poised at the extreme edge of viability because of the harsh climatic conditions. The Anza-Borrego is most threatened by recreational activities of people from nearby cities, especially off-road vehicle use. The Arctic National Wildlife Refuge is too remote for that particular threat, but drilling for oil on the Arctic coastal plain, where caribou calve and waterfowl nest, would threaten the basis of much of the ecosystem. The presentation concluded with hearty applause for Lisa's stunning photographs.