

New England Botanical Club - Minutes of the 993rd Meeting 5 December 2003 by Jennifer Forman, Recording Secretary

The 766th meeting of the New England Botanical Club, being the 993rd since its original organization, was held on Friday, December 5, 2003, in the Lecture Room of the Fairchild Biochemistry Building, Divinity Avenue, Cambridge MA. There were 43 members and guests in attendance.

President Paul Somers called the meeting to order and announced that the club's fundraising efforts had started off well. He also mentioned the spring passing of club member Virginia Magee and plans for an NEBC trip to the Appalachians in Spring 2004 (details later). Among several notes of club gossip was Kanchi Gandhi's announcement of a hybrid species of clubmoss, *Lycopodiella x gilmanii*, that was recently named by Arthur Haines in honor of club Vice President Art Gilman (Amer. Fern J. 93: 197. November 2003). Art then introduced Arthur as the night's speaker. Arthur is a plant biologist and field taxonomist working as a researcher at the New England Wild Flower Society. He spoke to the club about his current work for NEWFS, an herbarium recovery project.

Arthur began by describing the project, a reevaluation of rare species specimens and creation of an electronic database of herbarium records. The study includes examination of collections from 42 New England herbaria. Arthur noted the value of herbaria for providing botanists with species distribution data, voucher specimens, records for morphological studies, and samples for genetic studies.

Records for more than 500 native tracheophytes (i.e., vascular plants) were reevaluated and recorded for this massive study, which looked at species at all levels of conservation value. Many of these species are categorized as Division 1 in the *Flora Conservanda*, indicating that they have fewer than 100 global occurrences. Examples include the Anticosti aster (*Symphotrichum anticostensis*), found in New England only within the Aroostook River in northern Maine, and the globally rare northeastern bulrush (*Scirpus ancistrochaetus*). Examples of Division 2 species (fewer than 20 New England occurrences) included in the study are pale painted-cup (*Castilleja septentrionalis*) and Greene's violet (*Viola subsinuata*), native to Western New England. Selected species from Division 4, which have no extant New England occurrences (i.e., known only from historical records), included disjunct eyebright (*Euphrasia disjuncta*), the only herbarium record of which was lost in a fire. There were also species for which data were lacking, labeled as "Division Indeterminate." Examples include newly described species such as MacGregor's wild rye (*Elymus macgregorii*), as well as Wiegand's rush (*Juncus anhelatus*), which was recently given species status. Arthur induced hearty laughter from the crowd when he displayed a photo of one of the most peculiar specimens he came across: a cookie. A club member later solved the mystery by explaining that the cookie with an orchid imprint was a record of ones served by a student at her thesis defense.

All data from the herbarium specimens, including annotations, were recorded in a Microsoft Access database known as HERB. Over 18,000 records have been examined so far, and of these, about 1 in 8 (2095) had to be annotated, due to either misidentification or changes in taxonomy. The distributions of many of these species have changed, and in some cases historical records of species occurrences have turned out to be inaccurate. The survey resulted in the discovery of about ten new state records, including mare's tail (*Hippuris vulgaris*) in Massachusetts and bigseed alfalfa dodder (*Cuscuta indecora*) in Rhode Island. The ranges of other species shrank, such as bayberry willow (*Salix myricoides*), for which specimens were misidentified in all but one Maine county (Aroostook). The recognition of hybrid *Lycopodiella* species means that species such as Marguerite's clubmoss (*L. margueritiae*) had falsely large distributions that now have been corrected.

The next step for the Herbarium Recovery Project is the delivery of the data from the HERB database to New England's Natural Heritage programs. Field surveys will continue, to keep current species distributions up to date. Arthur ended his talk by pointing out the need for continued revision of *Flora Conservanda* and by noting additional rare species that require field and herbarium surveys to ascertain their status in New England. During the question and answer session that followed his talk, Arthur made note of the fact that herbaria are on the decline and would benefit by being credited by any author who found them to be critical for the work published in a manuscript.