

New England Botanical Club – Minutes of the 1024th Meeting 2 February 2007

Karen Lombard, Recording Secretary

The 797th meeting of the New England Botanical Club, being the 1024th since its original organization, was held on Friday, February 2, 2007 in the lecture hall of the Fairchild Biochemistry Building at Harvard University, Divinity Avenue, Cambridge, MA. There were 67 members and guests in attendance. Alice Schori presented the slate of officers for next month's annual meeting vote. Paul Somers announced the publication of both a status list of rare species for Massachusetts by the Massachusetts Natural Heritage & Endangered Species Program (NHESP) as well as a booklet, *A Guide to the Invasive Plants of Massachusetts*. This booklet was a collaboration between The Nature Conservancy, the New England Wild Flower Society (NEWFS) and NHESP and presents information on all 66 species considered as invasive, potentially invasive, or likely invasive in the state. Julie Richburg announced that graduate student research proposals are also due to the club next month.

Vice President Robert Bertin announced the evening's speakers, Melissa Dow Cullina and Arthur Haines, who jointly presented a talk on "Our Evolving Understanding of the Massachusetts Rare Flora: Collaborations from the Herbarium, Field, and Desktop." Melissa is a botanist with NHESP and Arthur is currently working on a manual of the New England flora (*Flora Novae Angliae*) with NEWFS. They started their talk with a photographic montage and tribute to current and deceased botanists in Massachusetts who have contributed a great deal to our understanding of the rare flora of the Commonwealth. Arthur then described the *Flora Novae Angliae* project, which will be a partly illustrated technical guide to the New England flora with a companion website that will include photos, county-level range maps, pictorial keys for amateurs, and multiple access keys. The guide will also include new taxonomic research.

Melissa then introduced the *Massachusetts Rare Plant Status List*, which includes species that NHESP tracks, including species regulated under the Massachusetts Endangered Species Act (MESA), a Watch List of species that are of concern, and the State Historic List of species that have not been seen for over 25 years. This list is an important way of communicating priorities to our conservation partners. The list also directly relates to the applied plant conservation work of NHESP in Massachusetts, including land protection, regulatory review, habitat restoration, and monitoring.

Melissa and Arthur followed their introduction by updating the audience on new discoveries since the publication *The Vascular Plants of Massachusetts: A County Checklist* by Bruce Sorrie and Paul Somers in 1999. They first reported on taxa that have been newly discovered in the Commonwealth through Arthur or Melissa's review of herbarium specimens. These taxa, which still need to be located in the field, include: *Calystegia silvatica* subsp. *fraterniflora*, *Crataegus lumaria*, *Selaginella eclipses*, and *Carex emoryi*. They next reported several plant taxa newly discovered by other botanists, including *Calamagrostis stricta* subsp. *inexpansa*, *Carex lupuliformis*, *Carex vacillans*, and *Populus heterophylla*. Newly re-discovered State Historic species in the Commonwealth included *Agastache scrophulariifolia*, *Calamagrostis pickeringii*, *Carex deflexa*, *Cynoglossum virginianum* var. *boreale*, and *Juncus ambiguus*.

Arthur and Melissa next explained that their collaborations have resulted in confirmation of the presence or absence of several rare taxa from the Commonwealth. Taxa they have confirmed for Massachusetts include the fern *Cystopteris laurentiana*, which Arthur noticed was attributed to Massachusetts in *Flora of North America Volume 2* (actually discovered on a 1976 NEBC field trip to Mt. Toby), as well as *Dichantherium acuminatum* subsp. *acuminatum*, not reported to be present in Massachusetts by FNA authors. In contrast, *D. oliganthes* subsp. *oliganthes* and *D. polyanthes* were confirmed to be unvouchered from the Commonwealth, despite several erroneous reports and incorrectly determined specimens.

The speakers next informed the audience of newly described species present in Massachusetts, including *Elymus macgregorii* (which looks similar to *E. virginicus*), currently present on the Merrimack River, and *Cypripedium parviflorum* var. *makasin*, known from fens of Berkshire County (among other locations). Melissa then touched upon some of the species (not mentioned in other aspects of the presentation) that have been added to the MESA list since the 1999 publication of *The Vascular Plants of Massachusetts*, including: *Carex mitchelliana*, *Desmodium cuspidatum*, *Liparis liliifolia*, *Lipocarpa micrantha*, *Polygonum glaucum*, *Potamogeton confervoides*, *P. strictifolium*, *P. vaseyi*, and *Utricularia resupinata*. Arthur highlighted five species that have been under-reported in Massachusetts because of taxonomic confusion. *Chenopodium foggi* is a calciphile that is very difficult to identify and for which New England may be a stronghold in its worldwide distribution. *Crataegus schizophylla* is endemic to Martha's Vineyard. *Eleocharis diandra* is only known extant from about five places in the world and is a near-endemic to the Connecticut River. *Elymus glabriflorus* is one of New England's rarest grasses and is found in dry oak-hickory forests. *Viola subsinuata* is a species that has often been mixed up with *V. palmata*. It turns out to be quite rare north of Connecticut in woodland areas overlying limestone or traprock. He continued by discussing unresolved problem species in Massachusetts, including *Dichantherium scabriusculum*, which cannot be found at its two former stations, and *Sagittaria subulata*, which cannot be easily distinguished from emersed, vegetative forms of *S. filiformis* currently.

Finally, Melissa discussed over-reported taxa in Massachusetts, such as *Amelanchier sanguinea*, a rare calciphile that has often been confused with *A. spicata*, and which is less prevalent than previously thought based on a review of voucher specimens. Also over-reported is *Viola nephrophylla*, a rare calciphile that has been often confused with *V. sororia*; sadly, only one historic voucher specimen and no current stations are known to exist in the Commonwealth. The speakers closed by entreating the audience for help in finding these rare species on the landscape, and to keep in touch with questions and findings.