



The 1149th meeting of the New England Botanical Club, Inc. will be held **Saturday, 6 February 2021, at 7:00 PM via Zoom.**



“Rethinking the Herbarium Specimen”

By

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PLEASE READ:

- 1) **PRESENTATIONS & MEETINGS WILL BE VIRTUAL:** Although since March 2020 all our spring presentations, summer field trips, and special events had to be cancelled because of COVID-19, New England Botanical Club is now offering meetings and presentations via Zoom. The link to join our Zoom Monthly Meetings will be reoccurring and is below. After this presentation, we invite attendees to stay on Zoom and participate in some “virtual visiting.” Feel free to provide your own refreshments!
- 2) **DR. HEBERLING’S ABSTRACT:** With over 390 million plant specimens collected by thousands of botanists over nearly five centuries in museums worldwide, herbaria (collections of preserved dead plants) comprise an enormous resource for understanding the world around us. Herbarium specimens are receiving unprecedented attention due to recently developed methods, new perspectives, and perhaps most notably, their increased accessibility through widespread digitization. While the longstanding functions of herbaria remain relevant in modern research, herbarium data are increasingly used in unanticipated ways. I will discuss the past, present, and future of herbarium specimen use, supported by a review of over 13,000 herbarium-related studies from 1923-2017. Specimens are increasingly appreciated as temporally and spatially extensive sources of genotypic, phenotypic, and biogeographic data. I will also highlight several unanticipated uses of specimens in my research, including documenting trait changes in invasive plants, understanding impacts of climate change on flowering and leaf out times, and using specimen roots to measure a century of soil microbial communities. As novel uses of specimens become more prevalent, new curatorial needs and perspectives need to be considered, including an open re-evaluation of the very collection event itself is needed. The use of digital observations and community science platforms, such as iNaturalist, provide a powerful approach to complement and enhance the research value of specimens. As we enter the Anthropocene, herbaria have likewise entered a new era with enhanced scientific, educational, and societal relevance.
- 3) **2021-2022 NEBC SLATE:** The Slate for the 2021-2022 Council proposed by the Nominating Committee will be posted on the NEBC [What's New](#) webpage when ready. The vote will be taken at the Annual Meeting on 6 March 2021.

IMPORTANT UPDATE ON NEBC RESEARCH AWARD APPLICATIONS:

The **DEADLINE** for applying for botanical research funding has been **extended to 1 April 2021**. It is hoped that this extension will provide researchers with additional time to gain a better sense of what projects might be feasible under these unusual and challenging circumstances. In addition to field research, proposals for analyses using existing data/specimens, working with digital herbarium specimens, or other botanical research projects that are less likely to be disrupted by future uncertainties are welcome. Announcements of all 3 awards for 2021 will be made by May 1st, 2021. Last year NEBC supported over \$19,000 in awards to **students, academics, and others** to continue to study our diverse New England plants. Please let colleagues know.

4) FUNDING OPPORTUNITIES FROM NEBC (DEADLINE EXTENDED TO 1 APRIL 2021):

- **NEBC JUNIOR FACULTY AWARD ON THE FLORA OF NEW ENGLAND** – Applications are accepted from early-career, tenure-track faculty at any college or university in New England. Full requirements and application instructions can be found on the [Junior Faculty Award on the Flora of New England](#) web page.
- **NEBC LES MEHRHOFF BOTANICAL RESEARCH AWARD(S)** – Full details for project requirements and application instructions can be found on the [Les Mehrhoff Botanical Research Award](#) web page. Summaries of past funded projects (2015-2020) and a button for donations to the fund can be found on the same web page.
- **NEBC GRADUATE STUDENT RESEARCH AWARD(S)** – Each year NEBC awards several thousands of dollars in support of botanical research conducted by graduate students. Full details for proposals and supporting letters can be found on the [Graduate Student Research Award](#) web page. Abstracts for previous recipients can also be found on this web page.

5) NEXT NEBC MEETINGS VIA ZOOM:

- On Saturday, 6 March 2021, **Wesley Knapp**, North Carolina Natural Heritage Program, Asheville, NC, will speak on "*Tales from the Crypt: The Extinct Plants of North America with a Focus on New England Extinction Events.*"
- On Saturday, 3 April 2021, **NEBC Distinguished Speaker, Dr. Robert Bertin**, Distinguished Professor of Science Emeritus, Biology, College of the Holy Cross, Worcester, MA, will speak on "*Regional Floras and the Assessment of Floristic Change.*"
- On Saturday, 1 May 2021, **Dr. Eric Doucette**, Dept of Biology, Massachusetts College of Liberal Arts, North Adams, MA, will speak on "*A New Approach in Amelanchier*"

- 6) **VIDEOS of PAST PRESENTATIONS:** Please see [Past Meetings](#) for videos of past lectures, including the unique January presentation by six members with ties to New England, but who no longer live in New England. Moving across the USA from east to west, speakers were: **Ian Medeiros**, Ph.D. candidate at Duke University, NC, will speak on his 2019 fieldwork studying lichens and endophytic fungi in South Africa and Namibia. **Jason Karakehian**, Ph.D. candidate at the University of Illinois Urbana-Champaign, will speak on the fungal genus *Rhytisma* in New England that is a leaf parasite of various species of trees and shrubs. In addition to illustrating some very common species, he hopes to gain your assistance in finding specimens of *Rhytisma andromedae* on *Andromeda polifolia* and *Rhytisma*

salicinum on *Salix*. **Marge Holland**, from the University of Mississippi, will describe a long-term botanical study with which she has been involved in New Hampshire since 1978. **Tim Whitfeld**, Collections Manager of the Bell Museum Herbarium at the University of Minnesota, will describe a 2019 botanical bonanza in the Boundary Waters Canoe Area Wilderness in search of the elusive *Phacelia franklinii* and other curiosities from the north woods of Minnesota. **Emil (Ame) Doyle** is retired, a graduate of the Native Plant Trust's Field Botany Certificate Programs, now living in Walla Walla, WA, and will speak about his work developing a regional botany educational program, monitoring rare plant populations, and his current research and photography interests. **Karen B. Searcy**, former Lecturer at UMass-Amherst and Curator of MASS, now living in Del Mar, CA, will speak on the flowering season in Crest Canyon Open Space Park, part of the Coastal Sage Scrub Community, San Diego County, CA.

7) **MEMBERSHIP RENEWALS ARE DUE:** [Renew Your NEBC Membership for 2021 Here!](#)

The Council will meet 4 – 5 PM on 6 February 2021.

ZOOM INVITATION FOR NEBC MONTHLY MEETINGS

Topic: NEBC Monthly Meeting

Date and Time: First Saturday of the month at 7:00 PM

Join Zoom Meeting

<https://zoom.us/j/98845538584>

Meeting ID: 988 4553 8584

One tap mobile

+19292056099,,98845538584# US (New York)

+13017158592,,98845538584# US (Germantown)

Dial by your location

+1 929 205 6099 US (New York)

+1 301 715 8592 US (Germantown)

+1 312 626 6799 US (Chicago)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

Meeting ID: 988 4553 8584

Find your local number: <https://zoom.us/u/adKxNNXCOj>

The New England Botanical Club

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