Newsletter of the

FRIENDS OF THE FARLOW

Number 71 | Fall 2019 | Tracy Barbaro, Editor

Materials from Wellesley College

Donald H. Pfister

Photographs and paintings often document our studies by providing accurate details on form and color of macrofungi in living condition. As was reported in the last newsletter, the Farlow Library has been undertaking digital projects to make these materials widely available. Recently we were contacted by Wellesley College regarding items of cryptogamic interest. The college is preparing for construction of a new science building and is consequently reviewing some of their teaching materials. We helped them document their collection of paintings and photographs of fungi and some exquisitely mounted ferns.

Photograph by Elizabth Eaton Morse, 1934. Courtesy of Harvard University Herbaria & Libraries.

Wellesley College materials being prepared for inventory & accession. Courtesy of Jeannette Everritt.

A number of photographs of California fungi were commissioned by a native New Englander, Elizabeth Eaton Morse (1864-1955). Morse was born in Framingham, Massachusetts, and received a diploma from the School of Art at Wellesley in 1891. She taught high school for a number of years and then returned to Wellesley, earning a degree in botany in 1926. She moved to California soon after and in retirement pursued research in mycology at the University of California, Berkeley. She studied and published on several groups of fungi from California. The photographs are of interest in that they have been verified by experts including A.

Friends of the Farlow Annual Meeting November 2, 2019
Please see page 7 for details

H. Smith, with whom she was a co-author on a paper on the genus *Cantharellus* in the western United States. A complete set of the photographs was given to the University of California, Berkeley (364 photos) and the National Fungus Collections. The Wellesley set is a smaller subset of those deposited at these two institutions; it was displayed and used primarily as a teaching aid. Morse distributed many specimens with printed labels, many of which were copiously annotated. In the Harvard collections we have myxomycetes, fungi of many groups, mosses, and pines. An obituary of Ms. Morse by Lee Bonar appears in Mycologia 48: 439-442, 1956.

The paintings of fungi are by Alice Mills Hadley (Mrs. Clark Hadley) (1849-1937) who studied at Wellesley from 1881 to 1883 and was an instructor of art at Wellesley College from 1883 to 1885. After her marriage she lived in Chelsea, Vermont, where many of the illustrated fungi were gathered. The watercolors are detailed and seem to accurately depict the form of the fungi. We know little else about the artist.

Painting by Alice Mill Hadley, date unknown. Courtesy of Harvard University Herbaria & Libraries.

The ferns mounted by Florence Andrews Neal have a more tangential connection to Wellesley. Florence Neil was the wife of a missionary and lived in Hawaii and later lived in Aintab, Central Turkey, dying at the age of 25 years on August 18, 1885. We think Neal's sister taught at Wellesley. Florence Neal's husband, Robert J. Neal, M.D., died in Aintab on November 16, 1884. Florence was the youngest

Hawaiian Fern, Florence Andrews Neil, 1875. Courtesy of Harvard University Herbaria & Libraries.

daughter of Rev. C. B. Andrews, a missionary of the American Board of Commissioners for Foreign Missions in the Hawaiian Islands. She was educated in Ann Arbor presumably at the University of Michigan. The ferns came with a label *"Hawaiian Ferns etc. Collected on the Island of Maui in 1875 by Florence Andrews Neal. Awarded Bronze Medal at Centennial Exposition, Philadelphia, 1876."*

The items from Morse, Hadley and Neal will be digitized and made available through the Harvard Herbaria database.

The connection between the Farlow and Wellesley runs deep. The Farlow sponsors a spring foray named for Clara Eaton Cummings, a professor of cryptogamic botany at Wellesley and a member of one of the early classes of graduates at Wellesley. She was a trail-blazing lichenologist. At her premature death in 1906 she was succeeded at Wellesley by Harvard graduate Lincoln Ware Riddle – student of W. G. Farlow and Roland Thaxter. Riddle took advantage of Cummings's collections at Wellesley and the rich lichenological holdings at the Farlow to investigate lichen systematics. Riddle came back to Harvard in 1919 when the Farlow Reference Library and Herbarium of Cryptogamic Botany was being formed. Riddle's death in 1921 was a blow to his family, the institution, and to the lichenological community.

News & Events from the Farlow

Society for the Preservation of Natural History Collections Meeting

Members of the Farlow attended the Society for the Preservation of Natural History Collections (SPNHC) 2019 Annual Meeting May 25-31, 2019, at the Field Museum, Chicago, Illinois. Director of Collections Michaela Schmull attended along with Genevieve Tocci and Jeannette Everritt. They gave the following presentations:

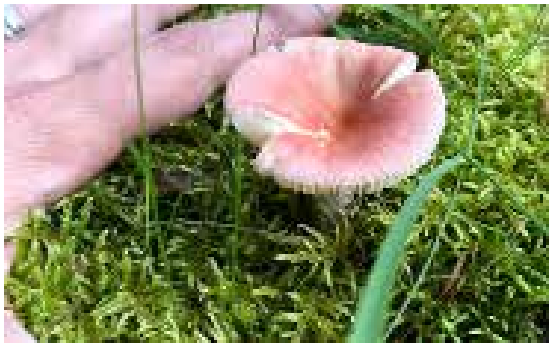
"Large Institutions' Post-TCN Struggles with Data Maintenance" (Presentation) Genevieve E. Tocci, Anne Marie Countie, Hannah Merchant, Laura Briscoe

"Fungarium Feasting: Which Pests are Eating Mycological Collections?" (Poster) Genevieve E. Tocci, Patrick Kelly, Laura Briscoe

"Specimen Spotlight: The Mummy's Lichen at the Farlow Herbarium" (Presentation) Michaela Schmull

Great Walden BioBliz July 2019

Members of the Farlow participated in the 2019 Great Walden BioBlitz on July 6, 2019. The BioBlitz, an event co-sponsored by The Walden Woods Project, Minute Man National Historical Park, and the E.O. Wilson Biodiversity Foundation, was held in celebration of Dr. E.O. Wilson's 90th birthday. The BioBlitz took place within a five-mile radius of Walden Pond. Interesting finds included an orange myxobacterium, a species of *Russula,* a mushroom pictured below and *Pleurozium schreberi*, a moss.



Russula species. Courtesy of Giovanna Bishop.

MassMyco Meeting

Friends of the Farlow co-sponsored MassMyco (October 2018), the biennial meeting of mycologists from around New England. The Farlow sponsored the keynote speaker, Chris Hittinger from the University of Wisconsin-Madison. His topic was "The Genomic and Metabolic Making of Yeast Biodiversity." The day was filled with talks and posters covering a variety of topics. Our own James Mitchell and Jason Karakehian gave talks:

"An Excursion to Collect Tropical Fugi in Gorongosa National Park, Mozambique" J. Karakehian

"Diversity and Host Specificity in the Genus *Sarea Fr.* (Ascomycota)" J. Mitchell

Herbaria Seminar Series

Farlow members James Mitchell and Luis Jesus Quijada Fumero will present talks as part of the Harvard Herbaria Seminar Series. Topics are forthecoming. The talks will take place on November 26 and December 3, 2019 in the Harvard Herbaria Seminar Room (HUH 125) from 12:00 - 1:00 pm and are open to the public. For more information please visit:
https://huh.harvard.edu/calendar/upcoming

In Memoriam

Long time Farlow friend, Harriet Provine passed away on August 8th 2019. For several years Harriet was designer of the FoF Holiday card. She regularly attended our annual lecture. She will be missed.

Work at the Farlow

Philip May Collection of Lichens

James Mitchell

I have been continuing last summer's project of inserting the curated portion of Philip F. May's lichen herbarium (and one alga) into the general herbarium. The majority of these specimens are now barcoded and filed, with any thin layer chromatography (TLC) results from his records included in the electronic record. May's herbarium contains lichens from New England (some rare), India, Missouri, Arkansas, Florida, and Wisconsin, areas from which the Farlow has few recent collections. The additional location data and reports of common and rare lichens are bound to be invaluable to American lichenologists.

Placidium arboreum, from the Herbarium of Philip F. May. Courtesy of Harvard University Herbaria & Libraries.

The insertion of May's herbarium also offered an opportunity to bring some genera, most notably *Physcia*, into line with the most recent North American Lichen Checklist. Over 1,800 North American and an uncounted number of "exotic" specimens were refiled to reflect updated synonymies and identifications. This work also offered an opportunity for discovery, including a fragment of a letter from a young Lincoln W. Riddle to his grandfather, the identity of the collector of several Alaskan lichens from the Willey Herbarium, a Christmas-themed "*Ramalina argentea*" (silver tinsel) specimen inserted into the herbarium in the 1970s, possibly the earliest ever collected specimens of *Chaenothecopsis nigripunctata* (misidentified as *Phaeocalicium curtisii*), and a number of misfiled North American specimens which have now been databased. As full of treasures and undiscovered curiosities as it is, it is always a joy to work in the Farlow.

Elso Barghoorn Microscope Slides

Liam Nokes

For the better part of the past century, boxes of slides from the work of Elso Barghoorn and David H. Linder have been floating around in storage and offices throughout the herbaria, finally settling in the Farlow. One set of slides came from Barghoorn and Linder's work on marine fungi in the 1940s, where they submerged wood in marine environments for months at a time and looked for fungal colonization. This culminated in the work "Marine Fungi: Their Taxonomy and Biology," published in Farlowia, and a set of type specimens deposited within the Farlow Herbarium. Visitors will be able to find these slides in the slide collections or by appropriate genus of marine fungus genera such as *Halophiobolus* and *Helicoma*. The other set of slides came from Barghoorn and Linder's work on the Boylston Street Fishweir, a 2,500-year-old Native American fish trap under Boylston Street in Boston's Back Bay. The fishweir was made by weaving wood around stakes in the intertidal zone. After cross referencing these numbered slides with Barghoorn's papers on the fishweir, we found that many of the slides referenced stake numbers from the fishweir sampling. Dr. Schmull reached out to the Phillips Academy in Andover, the original publishers of Barghoorn's work, and discovered that they, too, have wood samples from the Boylston Street Fishweir.

Anna M. Reid Bryophytes

Giovanna Bishop

The family of Anna Marie Murphy Reid, an amateur bryologist who passed away in 2012, gave Harvard over 11,000 specimens of bryophytes. I have gone through all of the identified material and have also done some identification work on the mosses that Reid collected in Oregon and Washington on American Bryological and Lichenological Society (ABLS) forays in the 1960s and 1970s. In addition to this work on the Reid bryophyes, I have helped incorporate over 2,500 specimens into the Farlow's general collection since starting my internship in January 2019. I will be starting my master's degree studies this fall studying lichen and bryophyte conservation and biodiversity at Eastern Washington University.

Visitors & Researchers

Danny Newman (Cornell University) visited to work with Luis Quijada on identification of Leotiomycetes of Ecuador.

Daniela Torres (Fundacíon Fungi, Santiago, Chile), visited the Farlow and spent a week at Eagle Hill Institute in Maine participating in Don's course on biology of fungi. She was studying the genus *Bisporella*.

Robert Dunn (Schiele Natural History Museum, Gastonia, NC) visited to see how we handled specimens at the Farlow.

Scott LaGreca (Duke University) visited in June to verify and redetermine lichens for the Berkshire Co., Massachusetts lichen checklist he maintains for lichenportal.org.

Jhon Alexander Osorio Romero (Universidad del Quindío, Colombia) visited the Farlow to learn techniques and investigate mycological projects that he and his students could undertake in Colombia.

Brett Huggett (Bates College, Lewiston ME), spent several days investigating techniques we employ to study endophytes. Brett worked at the Farlow in the past and did his Ph.D. at Harvard with Missy Holbrook.

Li-Jun Ma (Associate Professor, University of Massachusetts, Amherst) spoke as part of the Herbaria Seminar Series. The topic of her talk was **Adriana Romero-Olivares (Postdoctoral Research Associate University of New Hampshire)** gave a talk entitled "Ecosystem Genomics and Old Herbarium Mushrooms: Implications on the Ecology and Evolution of Fungi" as part of the Herbaria Seminar Series.

Congratulations and Farewell

We congratulate **Jason Karakehian**, who completed his Master of Liberal Arts in Extension Studies degree with a thesis entitled "A Preliminary Study in *Propolis* (Fungi, Ascomycota): *Propolis farinosa* - Common, Cosmopolitan and Plurivorous." An active and productive student of fungi, studying Rhytismatales and mycological history, he most recently published the paper "Placement of Triblidiaceae in Rhytismatales and Comments on Unique Ascospore Morphologies in Leotiomycetes (Fungi, Ascomycota)." Jason has served the Friends of the Farlow and the Boston Mycological Club in various important ways. We send him off with good wishes to the University of Illinois where he will begin his Ph.D.

Don and Jason in the Farlow Library, with mycologist Elias Magnus Fries in the background.

New Books at the Farlow

Gretchen Wade

The Farlow Library adds materials to our collection all the time. Here are some books and journals you may be interested in. The penultimate volume of John Engel and David Glenny's *A Flora of the Liverworts and Hornworts of New Zealand* has been released. The descriptions of each species are clear and precise and an extensive glossary is helpful. There is a section of stunning color illustrations and many detailed line drawings throughout. One interesting aspect of this series is that each volume acknowledges specimen loans from the Farlow Herbarium.

Aimed at the mycology student, *Fungal Biodiversity* (edited by P.W. Crous, G.J.M. Verkley, J.Z. Groenwald, and J. Houbraken) covers basic information about fungi and how to study them. The book is essentially a lab manual and companion text to a mycology course taught at the Westerdijk Fungal Biodiversity Institute. It uses a number of representative species to illustrate many topics, including fungal taxonomy, life cycles, medicinal uses, and more. The "lab manual" sections set this book apart from other general texts about fungi. It gives advice on how best to illustrate lab findings, cultivate fungi, and how to isolate and interpret DNA in the lab. It's almost like taking the course without having to travel to The Netherlands.

The Farlow Library also receives many journals each month. Some of them are well known (*Mycologia, The Lichenologist*), some of them are lesser known (*Bulletin of the California Lichen Society, Schweizerische Zeitschrift für Pilzkunde*), but all of them are useful and important to our collection.

Digitizing Project Update

Diane M. Rielinger

Preservation and digitization of original artworks from the collections of the Botany Libraries, as described in the Fall 2018 newsletter, is progressing well with over 1,000 images from the Farlow archives completed. The following collections are now available online:

Lizzie Churchill Allen Watercolors of Fungi (1915-1921). 708 items. http://id.lib.harvard.edu/alma/990006032560203941/catalog

Illustrations of Champignons Collected by Paul Maury in the Patouillard Herbarium (approx. 1898). 56 items. http://id.lib.harvard.edu/alma/990151829530203941/catalog

Mexican Mosses Collected by C.H. Berendt in 1865..., by William S. Sullivant (approx. 1865). 69 items. http://id.lib.harvard.edu/alma/990055830570203941/catalog

Icones muscorum by William S. Sullivant, 2 volumes (approx. 1860). 215 items. http://id.lib.harvard.edu/alma/990133241700203941/catalog and http://id.lib.harvard.edu/alma/990133245680203941/catalog (supplement)

Still to come are a collection of watercolors by Eliza Beulah Blackford, original paintings of Champignons du Tonkin, and watercolors from the classic *Icones Farlowianae* by W.G. Farlow.

Amanita caesarea, annotated "Great Caution!" by Lizzie C. Allen, August 5, 1905. Courtesy of Harvard University Herbaria & Libraries.

Book Sale! *After a two-year hiatus we are again offering donated books to members! The list of available titles is included with this mailing.*

Farlow Finding Aid

Danielle Castronovo

In 2017, Harvard libraries implemented a new archives management system called ArchivesSpace. Much of the work that I have done at the Botany Libraries has included rehousing collections, refining finding aids, and entering finding aids into ArchivesSpace to publish online. The goal of this work is to preserve the physical materials and to create detailed descriptions of the collections so researchers can discover their contents. One of the most exciting things about this project is that the Harvard Library catalog (HOLLIS) provides full-text searches of finding aids. This will allow researchers to discover materials from the archives through a general search.

The William Gilson Farlow Papers form the largest archival collection in the Farlow Reference Library and are historically significant. The archive contains sixteen series and approximately sixty linear feet of material including Farlow's correspondence, research and academic materials, Icones Farlowianae materials, manuscripts, specimens, photographs, illustrations, and artifacts. Despite multiple processing efforts, this collection is so large and complex that I needed to do more archival work in order to get it ready to be entered into ArchivesSpace. I had several meetings with Don Pfister, whose expertise cleared up several mysteries in the collection. He provided context for several items that I had questions about, allowing me to better place material within the collection. Various people have described different pieces of the Farlow papers, and I have nearly completed the integration of these descriptions into a final finding aid.

A draft of the William Gilson Farlow Papers finding aid has recently been published in Harvard's online finding aid portal called HOLLIS for Archival Discovery.

Annual Meeting November 2, 2019

The Friends of the Farlow Annual Meeting will take place on Saturday, November 2, 2019, at 3:30pm for the business meeting with a lecture at 4pm in the Harvard Herbara Seminar Room at 22 Divinity Avenue, Cambridge, MA 02138. A reception will follow.

Troy McMullin, Research Scientist in lichenology, research and collections at the Canadian Museum of Nature will be our speaker.

Dr. McMullin in the field.
Courtesy of Paul Sokoloff.

Dr. McMullin's research has taken him to the northern end of Ellesmere Island in the Arctic to the Everglades and from the Avalon Peninsula in Newfoundland to Haida Gwaii (formerly the Queen Charlotte Islands). He will discuss discoveries in lichen biogeography, ecology, ethnolichenology and taxonomy. Troy will also present the current status of lichen conservation on the continent. One focus will be on the Gaspe Peninsula, where he built on results from expeditions lead by Harvard botanist Merritt Fernald between 1906 and 1923.

Please visit the Friends of the Farlow website for more information about the Annual Meeting as the date approaches: https://fof.huh.harvard.edu/.

Special thanks to Don Pfister, Gretchen Wade, Judith Warnement and Genevieve Tocci for their assistance with copy editing and layout for this edition of the Friends of the Farlow Newsletter.

Join us!

Receive the FoF Newsletter, notification of the annual book sale, discounts on Farlow publications and services, invitations to the annual meeting and other events, and a special welcome when visiting the Farlow. Dues notices will be issued in December.

Name: _____

Address: _____

City: _____

State, Zip/Postal Code: _____

Country: _____

Telephone/Fax: _____

E-mail Address: _____

Membership Categories

Member ..... ($25)

Sponsor ..... ($50-100)

Benefactor ..... ($1000)

Pofcher Fund $_____

Philip May Fund $_____

Amount Enclosed $_____

Please make checks payable to: Friends of the Farlow
Harvard University Herbaria
22 Divinity Avenue
Cambridge, MA 02138 USA

22 Divinity Avenue
Cambridge, MA 02138
United States
http://fof.huh.harvard.edu/

FARLOW REFERENCE LIBRARY OF CRYPTOGAMIC BOTANY * HARVARD UNIVERSITY

FRIENDS OF THE FARLOW

FIRST CLASS