

Report: Les Mehrhoff Botanical Research Fund

The Mycological Correspondence of Rev. Moses Ashley Curtis and Rev. Joseph Blake, 1856 – 1861.

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The cryptogamic herbarium of the New England Botanical Club contains 545 specimens of fungi by various collectors including E. D. Merrill, W. G. Farlow, J. F. Collins, P. L. Ricker, F. L. Harvey, A. B. Seymour, C. G. Pringle and others. The collections date from the mid-19th century to the early decades of the 20th. The earliest collections are those made by Rev. Joseph Blake (1814–1888) consisting of 42 specimens collected from Maine, Vermont, New Hampshire and Massachusetts. Collection dates range from 1858 to one month before Blake's death in May, 1888. Some of these collections are mounted to paper with documentation by Blake and nearly all provide information on substratum and locality though more than half are undated.

My volunteer work in the NEBC cryptogamic herbarium from 2011 to 2014 encompassed repackaging and logging each fungal specimen into a spreadsheet. The Blake collections, being the earliest in the lot, were intriguing. What was Blake's relationship with the mycological authority of the era, Rev. Moses Ashley Curtis (1808–1872) of the Carolinas, and with fellow New Englander and protégée of Curtis, the banker/botanist/poet Charles James Sprague (1823–1903) of Boston? What was the scope of Blake's mycological work? Could further research on Blake add more detail to our knowledge of the state of American mycology in the antebellum period; an era of citizen scientists and nascent professionalization in the biological sciences?

Initial research on Blake yielded a notable paper published in *Mycologia*, 1934 by Neil E. Stevens supplying a brief biography and transcriptions of some correspondence to him by Curtis. Blake was an active botanical collector and amassed a large personal herbarium of vascular plants, mostly from the southeastern counties of Cumberland and York, Maine. During his life he supplied specimens to Asa Gray and the herbarium of the Portland Society of Natural History among others and is particularly known from his participation in two ascents of Mt. Katahdin in 1836 and '56. He is credited with the discovery of *Saxifraga stellaris* on Katahdin, and for contributions on the Graminales of Maine to a mid-19th century flora of that state. Blake's vascular herbarium, along with the bulk of his fungal herbarium and personal papers are currently housed at the University of Maine at Orono.

A grant from the Les Mehrhoff Botanical Research Fund allowed me to travel to Orono and spend a few days examining Blake's papers and fungal collections. Prior to 1855 Blake had engendered

an interest in fungi and in that year turned, like many botanists of the era, to Asa Gray for assistance in finding a correspondent on the subject, and it was Gray who placed Blake into contact with Curtis. Curtis mentored Blake in the particulars of preserving fungal specimens and the two began a six year correspondence. At the time, little mycological work had been done in the New England states prior to Blake, Sprague and Charles Frost of Vermont and so Curtis set to work identifying Blake's dried collections, providing lists of determinations in each of his return missives and sending notes on Blake's Maine fungi to Sprague who had already published an initial checklist of New England fungi and was preparing a second for the Proceedings of the Boston Society of Natural History. From the Curtis correspondence there are 800 determinations listed, though a portion of these are duplicates of the same species or simply indeterminable for various reasons and noted "too old" or "*nil perfectum*" for example. The correspondence concludes only a few months before the bombardment of Fort Sumter in 1861 and apparently did not resume after the American Civil War ended four years later, though Blake continued to collect fungi for the remainder of his days.

At the time of my trip to Orono, the University's fungarium had just been transferred to a new herbarium facility. Blake's fungi had been integrated into the general fungarium, and of this only part of the fungal collections were catalogued. However, derived from this spreadsheet the author was kindly provided a list of fungi from Blake's herbarium by Dr. Seanna Annis and Dr. Christopher Campbell. Each catalogued specimen was located and examined. This revealed collections, in addition to those by Curtis and Sprague, made by various other contemporaries of Blake including J.L. Russell of Salem, J.B. Ellis of New Jersey, T.W. Peters of Alabama and D. Murray of Roxbury, an associate of Sprague. There were a handful of intriguing collections bearing the name "Manda, Africa"; presumably Manda Island off the Kenyan coast, and a date of 1878 attached to one label though the collector is not noted.

A more detailed account of Blake's mycological correspondence and collections is currently in process and will be submitted to *Rhodora*. In addition to Dr.'s Annis and Campbell, the author wishes to acknowledge funding received for this project by the Les Mehrhoff Botanical Research Fund, administered by the New England Botanical Club.