



Newsletter of the **FRIENDS**
OF THE
FARLOW

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L.B. Berard, editor

Lichens and Politics Meet on Mount Everett

Philip May

Let's start with the setting. At 793 meters (2608 feet), Mount Everett is the highest and most visible mountain in southwestern Massachusetts. The Appalachian Trail runs directly over its open ledgy summit. From its summit ledges there are easy views into Connecticut and New York, both less than six kilometers away. Like the better known Mount Greylock and Wachusett Mountain, much of Mount Everett is incorporated into a state reservation, run by the Massachusetts Department of Environmental Management (DEM).

In April 1999 the local school district made a request to DEM that a remote weather-sensing system and a microwave relay station be installed on the unused fire tower on the summit of Mount Everett. This innocuous request started a political battle that is still going on today.

As is usual, those wishing to preserve the summit from change tried to develop biological arguments to bolster their position. They were lucky: the summit is covered by an unusual and striking dwarf pitch

pine forest. The preservationists followed up their luck with hard cash. They hired several forest ecologists and other plant and animal specialists to study this forest. So far three cryptogamic botanists have participated in these studies: Rick Van de Poll (non-lichenized macrofungi), Norton Miller (bryophytes), and myself (lichens).

My assignment was to find all the lichen species growing in the summit zone, an area of about 8 hectares. I was skeptical going into the study. In southern New England, pitch pines do not usually support a diverse lichen community. Nor do fifty-year-old red oaks, such as those covering part of the summit area. Silicic ledges usually have moderately high lichen cover and moderately low diversity. In addition, few terricolous lichens grow in the study area due to a thick layer of fallen leaves. I expected therefore to find a limited flora and no interesting lichens. I was both right and very wrong.

True, the site was too dry (and too polluted?) for cyanolichens and calicioid spe-

Clara Cummings Walk
Saturday, May 11, 2002. See page 4.

cies. And only two small epiphytic non-cladoniform fruticose thalli were found in hours of searching. So in that sense the flora was indeed limited. On the other hand, enough substrates and different niches were present to provide homes for 112 species—a fairly large number for such a small site in southern New England.

What amazed me was the number of species I'd never seen before. The pines were covered with a biatoroid lichen resembling *Lecanora symmicta*, but full of atranorin. This turned out to be *Lecidea ramulicola* (H. Magn.) Hillm. (now transferred to *Lecanora*)—a forgotten European species. Now that word is out, the lichen is being found elsewhere in the eastern U.S.

Sterile crusts are always a good group in which to make new discoveries: *Fuscidea pusilla* (new to Massachusetts) grew on pitch pines and *Rinodina efflorescens* (new to Massachusetts and probably New England) grew on hardwoods. An infertile sorediate form of *Lecanora caesiorubella*, a taxon not previously known to be sorediate, was tentatively identified on the basis of its distinctive chemistry. Sterile species #1 (norstictic acid) is apparently undescribed. It grows on both pines and deciduous trees and has since been found in central Massachusetts as well.

Lepraria borealis (first report for New England) was found on schist in a shaded cavity. Four other *Leprarias* apparently do not match described species.

I found several interesting fertile crusts growing on schist. *Diploschistes badius*—a member of the distinctive *actinostoma*-group—certainly must be rare. The nearest known locality is in Arizona. Two presently undescribed (but not unknown) *Rhizocarpon* taxa were found. The northern species *Lecidea tessellata* (first Massachusetts report) is common on the schist ledges. A few specimens of a possibly

undescribed member of the *Lecidea auriculata* group were encountered.

In short, there are plenty of lichens worth protecting on the summit of Mount Everett. Would the construction or presence of communications towers endanger these lichens? If construction were carefully done, probably not. The present derelict tower sits in an area that is already highly disturbed, so that if workmen were to confine their activities to that area, the only lichens that might be damaged would be common pebble lichens (e.g., *Trapelia involuta*) and a few common sun-loving rock lichens.

The principal risk to the lichens on the summit is fire. Amazingly the probability of a natural fire on the summit appears to be low. There have been no fires recorded since the early 1900s and there is no physical evidence of major fires before then, such as large amounts of charcoal in the soil or scarred stems. Furthermore, unlike their lowland relatives, the Mount Everett pitch pines do not depend on fire for propagation. Once mature, their cones open by themselves, dropping their seeds as do most other pine species. This lack of cone serotiny, in fact, is one of the most unusual features of the summit pitch pine forest.

A second risk to lichens, particularly the saxicolous ones, is foot traffic. In the short term this could come from construction workers. In the long run the danger would be from hikers leaving the trail for lunch, views, or to answer the call of nature. As Mount Everett becomes better known to hikers (due perhaps to publicity associated with the political battle!), the risk to lichens may go up as well. I therefore recommended that passive measures be taken to encourage hikers to remain on the trail. This has worked well in the White Mountains of New Hampshire.

The ecologists who have visited the summit forest agree that it should be strictly

protected. However, there has been little study of whether work on the fire tower would actually damage the surrounding area.

The principal issue has been whether DEM would (1) strictly supervise any construction activity to minimize its environmental impact, and (2) limit the amount of construction over the long term. Preservationists have been afraid that DEM will turn the summit of Mount Everett into another Wachusett Mountain—a barren summit loaded with major communications facilities. They argue that DEM has a strong economic incentive to do just this: generous rental fees from communication companies in a time of limited public funding. They further argue that DEM has a history of starting with small projects and then expanding them once the door has been opened. They suggest, based on evidence from DEM's own memos, that DEM has deliberately followed this policy in the past and therefore will probably do so in the future.

As things stand now, the original request from the school district has been withdrawn. Despite this, DEM has stated its desire to renovate the tower. However, the Massachusetts Environmental Protection Agency has placed sufficient procedural requirements on the project that any construction now appears unlikely. Informed sources now say that DEM will remove the fire tower. We await the final word.

FOF Administrative Change

Early this year David Hibbett who had served us admirably as FOF President found the press of obligations on other fronts too great to continue as President. Mary Lincoln, elected FOF Vice President only last November, has gracefully moved into our leadership role. Thank you, Mary!

News of the Farlow

Scott LaGreca

Last fall **Kathy LoBuglio** began postdoctoral work at the Farlow Herbarium. Before coming to the Farlow, Kathy did postdoctoral work on ascomycete fungi in Berkeley, California. She is currently working with **Karen Hansen** on molecular systematics of the Pezizaceae (ascomycete fungi).

Elizabeth Kneiper, Scott LaGreca, Elisabeth Lay, and Marty Maxfield spent two days in mid-October collecting lichens on Martha's Vineyard. They were hosted by **Stephen Sponberg**, Director of the Polly Hill Arboretum, and arboretum associate **Allan Keith**. Checklists of lichens from various sites on Martha's Vineyard will be published in the PHA Newsletter.

In November Friends of the Farlow Graduate Fellow **Maria Teresa Gallego Morales** (Universidad de Murcia, Spain) spent a month at the Farlow studying *Syntrichia* (mosses).

Kris Peterson, one of **Don Pfister's** graduate students, spent most of last November and December in New Zealand and Australia collecting *Cyttaria* (ascomycete fungi) for her dissertation research.

Also in December, **Bruce Allen** (Missouri Botanical Garden) visited the Farlow to examine specimens as part of his continuing work on the moss flora of Maine.

In January **Don Pfister** traveled to Hispaniola to collect ascomycete fungi. Although he broke his arm, he reports it was otherwise a fun, productive two weeks.

Abdullah Abbas, the director of the herbarium at Xinjiang University, China, spent February at the Farlow. While here he and **Scott LaGreca** identified lichen specimens from Xinjiang, which is (lichenologically) a poorly known Chinese province. He gave over 100 specimens of Chinese lichens to the Farlow, and we are

looking forward to continued exchanges with his institution.

During the weekend of February 26-28, Don's graduate students **Brian Perry**, **David Hewitt**, and **Kris Peterson** traveled to the Louisiana State University, Baton Rouge, to attend a Deep Hypha meeting. The "Deep Hypha" researchers are concerned with elucidating the phylogenetic relationships of the higher fungi and their allies.

Mary Lincoln recently spent a week as a PEET scholar at the Missouri Botanical Garden, working with **Bruce Allen**. While there, she learned *Grimmia/Schistidium* (mosses) taxonomy, as well as microscopic techniques. At the Farlow Mary continues her work integrating the cryptogamic collections of the New England Botanical Club with the general Farlow collections.

In March graduate student **Dirk Krueger** (University of Tennessee, Knoxville) visited the Farlow and gave a seminar on the systematics of *Polyporus* (basidiomycete fungi).

Sam Hammer traveled to Tasmania to study Cladoniaceae (lichens) in March. Over the past year, Sam has given over 850 lichen specimens to the Farlow. Thank you, Sam!

Clara Cummings Walk
Estabrook Woods, Concord, MA
Saturday, May 11, 2002
10:30 am-3:00 pm

Please join us for the 2002 Friends of the Farlow Clara Cummings Walk in what Henry Thoreau called Estabrook country. For background information on this 1200 acres of contiguous forest go to: www.walden.org/scholarship/e/ells_steve/estabrook/.

Directions: From Concord Center travel NW on Lowell Road (just to the left

of the Concord Colonial Inn). Turn right on Liberty Street just after you cross the river. At 0.3 mile go straight on Estabrook Road where Liberty Street turns right. At another 0.3 mile Estabrook Road bears right at a fork. Follow this to the end where we will park and meet. (Directions to Mary Lincoln's home for tea and cookies will be distributed at the walk.)

Bring: a picnic lunch, bug repellent, hand lens, pocket field guides, and friends.

FOF Financial Report
July 1, 2000 - June 30, 2001

Beginning balance	\$11,083.92
Income	
Membership and gifts	3,095.00
Book sale	1,356.83
Cards	40.00
Total	4,491.83
Expenses	
Library displays	123.66
Library purchase	600.00
Visiting scholar	0
Membership letter	136.91
Christmas cards	133.91
Annual Meeting (Siver)	810.44
Newsletter (2)	345.58
Book sale	85.60
Clara Cummings Walk	0
Misc	31.59
Total	2,267.69
Closing balance	\$ 13,308.06
Pofcher Fund	
Starting balance	\$ 1,760.00
Income (contributions)	1,300.00
Closing balance	\$ 3,060.00
Endowment	
Balance 7/1/00	\$ 39,232.00
Increase	2,796.88
Balance 6/30/01	\$ 42,028.88

Phil May, Treasurer

Friends of the Farlow Book Sale 2002 Update

*Judy Warnement
Director of the Library*

The annual book sale is a very popular benefit enjoyed by FOF members. You will soon receive the list of offerings for the 2002 sale. This will put the sale back on the traditional spring schedule, and we will do our best to organize future sales to occur in April.

You might wonder how the list is assembled and who determines the prices. I confess that I maintain the inventory that consists of new donations, books yet-to-be offered, and "remainders" from previous sales. Over the winter I cull out a mix of titles and begin the list. I also consult online used booksellers and consult natural history bookseller's catalogs to determine the "market value" of each title. The FOF sale prices are generally set 10-20% lower than commercial rates. I simply assign a price to items not listed by other vendors. I base the price on the condition, size, subject, content of the item, plus the experience of past sales. Don Pfister checks and occasionally adjusts prices when he reviews the final draft of the list.

Of course, the sale is not complete until all of the orders are collected by Ingrid McDonough and delivered to Elizabeth Kneiper and Linda Berard. Elizabeth and Linda then meet to apply the mysterious and complex algorithm that allows for the fair and equitable distribution of books to the many bidders. They prepare invoices, sort, pack, and ship the books to you. Ingrid collects and deposits your payments, and our treasurer, Phil May, gives glowing financial reports at the annual meeting.

None of this would be possible without the generous support of FOF members who

visit, drop off, or send books throughout the year. Since many of the materials come directly to me, it is like experiencing Christmas and family reunions all year long. Amy Rossman has sent a box full of publications. Elizabeth Kneiper delivered a copy of Larry St. Clair's latest lichen book, and Roger Goos donated an enormous reprint collection that will appear in future sales. Gerry Kaye combined a delivery of books with a lunch date on a day off from her genealogical research and between trips to New Zealand and Costa Rica. Mr. and Mrs. Julius Kovach invited us to pick up several boxes of books at their Boston home prior to their move to Youville House in Cambridge this February. Nancy Reid kindly offered books by sending email lists, and then the books appeared when her husband, Bob, visited the library. Sam Hammer made several donations during regular visits this winter just prior to his latest trip to Australia.

I would like to personally thank all of these FOF members, as well all of the members who have donated books in the past, for providing the resources that allow the sales to continue. The annual sale is an important source of revenue to FOF. It's also a wonderful way to recycle books.

If you are interested in donating books or volunteering to help with any aspect of the book sale process, please contact any of the FOF officers or me at:

warnemen@oeb.harvard.edu
phone: (617)496-1025.

Trip to Harbor Islands

On Saturday, June 1, Scott LaGreca and Elizabeth Lay will lead a walk, "Lichens of Fort Warren," on George's Island. For more information see: <http://data.massgis.state.ma/Biodiversity/BiodiversityDays.htm>.