

Josiah Lincoln Lowe, 1905–1997

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Josiah Lowe, the 30th president of the Mycological Society of America, died April 30, 1997, in Syracuse, New York. Born February 13, 1905, to Josiah A. and Anna Case Lowe in Hopewell, New Jersey, Lowe was one of 13 children. He attended Hopewell Elementary and Pennington, New Jersey, High School, delivering groceries after school to help defray family expenses.

Lowe earned a bachelor of science degree from the College of Forestry, State University of New York, Syracuse, in 1927. He held a number of jobs during college to pay his undergraduate expenses. Later, he would express astonishment that he could have done that and still graduate at the top of his class. In a botany class, Lowe met Dolores Oliphant. Although botany was required in her master of science degree program, she had tried to avoid the class, telling her major professor “I hate botany!” They were married in 1932 in Syracuse and spent their honeymoon in a tent at the College’s Pack Forest, Warrensburg, New York, where Lowe’s summer job was conducting research on white-pine blister rust for Professor R. R. Hirt. Joe and Dolores enjoyed more than 50 years together and had one daughter, Gratia.

The University of Michigan awarded Lowe a doctorate in 1938. Initially C. H. Kauffman was his major professor. In 1928, Alex Smith arrived at Ann Arbor and he and Lowe shared an attic room in the Kauffman house. In exchange for lodging they shoveled snow and stoked the coal furnace. Kauffman enjoyed fishing and tying flies (Williams 1977), among many other things, and he might have been responsible for Lowe’s and Alex’s avid interest in fly fishing. After Kauffman’s death in 1931, E. B. Mains supervised Lowe’s studies. We don’t know how his thesis topic was decided upon, because neither Kauffman nor

Mains were lichenologists. But his thesis, published as “The genus *Lecidea* in the Adirondack Mountains of New York,” is a classic in lichenology.

In 1938, Lowe began an academic career at the College of Forestry that lasted nearly 40 years. He was extremely dedicated to the college. Such dedication might be explained largely because the college hired him at a time when jobs were scarce and jobs in one’s specialized area of interest were rare. And Lowe said on occasion, “Just imagine; they’re paying me to do what I love doing.”

At the college, he taught a variety of both graduate and undergraduate botany and mycology courses, including field ecology during summer camp at Pack Forest. His advanced mycology course covered four semesters and was strongly recommended to graduate students in mycology and forest pathology. In both the laboratory and field he emphasized research techniques and familiarity with both classical and current literature. Lowe believed that an understanding of history was essential. Biographical notes, obituaries and, from his own collection, kodachromes of mycologists were an integral part of the course. He insisted that, by understanding the conditions under which a mycologist worked, it was easier to understand their approaches to problems and the decisions they made. In addition to teaching and research, Lowe supervised a number of graduate students (TABLE I).

Breaks in the school year permitted concentration on research that often meant driving to Maryland to study at the National Fungus Collections in Beltsville and at the nearby Forest Disease Laboratory. Graduate students studying the taxonomy of wood-inhabiting Basidiomycota “volunteered” to go and, in retrospect, these trips provided valuable field experience.

Lowe built up a mycology herbarium as a teaching and research tool and insisted that graduate students learn and use good management techniques, from collecting, right through long-term preservation, and judicious use of and respect for herbarium specimens. Lowe was a diligent collector and always had an eye out for large fruitings that were suitable for use in the mycology courses or were sufficient for 10–15 packets to be exchanged with mycologists and herbaria around the world.

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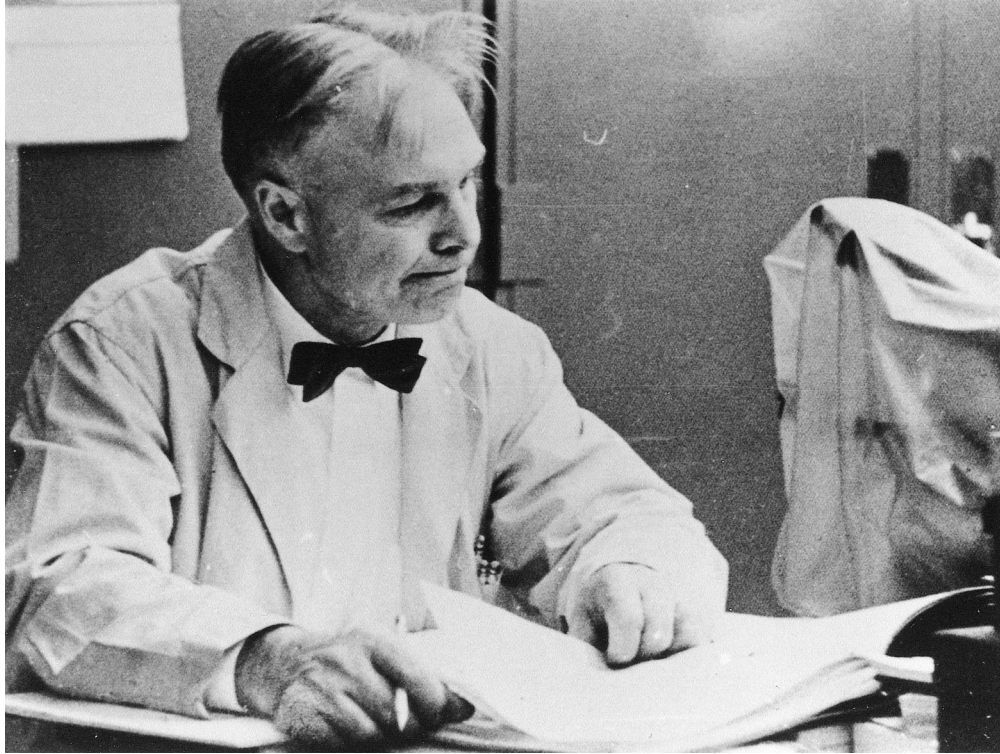


FIG. 1. Joe Lowe puzzling over the identify of a polypore. College of Forestry, Syracuse, New York, 1974. Courtesy E. C. Setliff.

Lowe's research as a classical systematist necessitated a specialized library, and he proceeded to accumulate the original descriptions of polypores and allied species. He did this by visiting libraries, especially at Cornell, Harvard and Beltsville, and photographing the pertinent pages of international journals and books with his trusty 35-mm SLR Leica. Back at the college, prints, sized to make maximum use of the sheets, were made of the descriptions. In 1967, the collection of photographed descriptions filled several file drawers and saved both Lowe and his students a significant amount of time. Thus was the system before photocopiers.

Lowe was in contact with L. O. Overholts at Pennsylvania State University by 1934 because that was when Overholts acknowledged Lowe for confirming the identity of a collection. Lowe remarked (to JG) that "Initially Overholts was wary of my intention in sending specimens for opinions and visiting Overholts' herbarium. It took some effort to convince Overholts that I wanted to learn about the polypores and not to snatch data. Although he was never my teacher, he (Overholts) has been in fact the chief influence in my mycological life. . . . Likewise, my work . . . has been made possible, in large measure, by the true scientific spirit of Dr. Overholts, who placed at my disposal, in the last years of his life, the

vast resources of his knowledge of the polypores. When he died in 1946, I was able to continue substantially at the level of knowledge that he had achieved and so saved years of preparation." (Lowe 1963:1). Overholts' *magnum opus*, "The Polyporaceae of the United States, Alaska and Canada," was incomplete (Lowe in Overholts 1953) when he died. Mrs. Overholts inquired of Lowe what could be done about it, and he made a large investment of time over the next five years completing the manuscript and seeing it to publication.

A cooperative project with a U.S. Forest Service pathology and mycology laboratory, initially at Laurel, Maryland, and later at Madison, Wisconsin, involving the culturing of wood-decay fungi, was begun in 1947 and continued nearly 30 years. Hundreds of cultures were obtained in the field by Lowe, his associates and their graduate students. The value of these cultures was that they came from fruiting bodies and Lowe could name the fruiting bodies. This bank of named cultures was invaluable in identifying mycelial cultures from decayed trees.

In 1954, Lowe was a principal organizer of the first Charles Horton Peck Mycological Foray at Warrensburg. He continued to be the driving force behind the Peck Foray from its start into the early 1980s. He saw its purpose as a venue for professional and am-

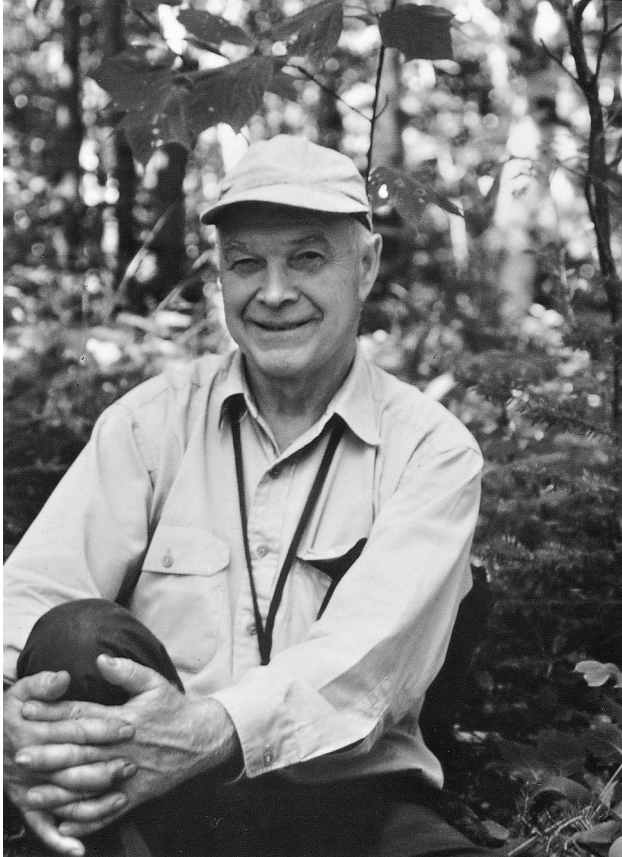


FIG. 2. Lowe in his beloved Adirondack Mountains, New York, August 25, 1976. Courtesy C. J. Wang.

ateur mycologists and students to get to know each other and to learn from each other. During the Lowe years it was not uncommon for several past presidents of the Mycological Society of America, in particular R. F. Cain, R. P. Korf, C. T. Rogerson, R. L. Gilbertson and Lowe, to be present at a Peck Foray. The foray sites moved around New York, occasionally venturing outside the state, with the idea of attracting participants from the various regions and for intensive collecting and identification of fungi in different habitats. Peck Forays were memorable but not always for fungi. One year at Cornell's Arnot Forest, where the bunkbeds were in screened cabins, it was so cold that one student slept between two mattresses and, in the middle of the night, some people moved into a motel. And at Colby Lake lodge, the two preteen daughters of Brazilian mycologists Oswald and Maria Fidalgo left for their darkened room and immediately there were terrified screams. Lowe ran up the stairs two at a time prepared for an emergency. He returned laughing. The caretaker's pet raccoon had gotten into their room and startled the city girls.

Lowe had a variety of interests and particularly enjoyed cross-country and downhill skiing and setting up slalom courses for student competition. For many years, his "Christmas lecture" concerned how to make skis. He read on a vast array of topics; was passionate about flyfishing and fly-tying; collected classical music on 78-rpm vinyl records; made wine with mixed results; liked berry picking, always including extra for neighbors and friends; cooking jams; and camping (he made his own tents).

TABLE I. The graduate students of Josiah L. Lowe

Name	Degree & Year	Thesis title
Felix J. Czabator	Ph.D. 1950	The resupinate Hydnaceae of New York and their relation to the decay of wood ^a
John Hunt	Ph.D. 1954	Taxonomy of the genus <i>Ceratocystis</i> ^a
Robert L. Gilbertson	Ph.D. 1954	Polyporaceae of the northern Rocky Mountains and Pacific Northwest
Sukumar Mukherjea	Ph.D. 1957	A manual of the genus <i>Fomes</i> for India, Pakistan and Burma
Anton R. Slysh	Ph.D. 1959	The genus <i>Peniophora</i> (Basidiomycetes) in New York State
Robert J. Bourchier	Ph.D. 1960	Microfungi in the stems of living Lodgepole Pine
Rodney C. DeGroot	Ph.D. 1963	Association of <i>Fomes pini</i> with weevil-killed leaders of Eastern White Pine
Michael J. Larsen	M.Sc. 1963	Fungi causing decay of hardwood pulp bolts in New York State
James H. Ginns	Ph.D. 1967	The taxonomy of <i>Merulius</i> using sporophore and cultural characters
Mario A. Eusebio	Ph.D. 1968	Studies on fungi associated with decays of wood products in the Philippines
Edson C. Setliff	Ph.D. 1970	The biology of <i>Poria vincta</i> ^b
Oton Holmquist	Ph.D. 1972	On some Venezuelan polypores important in wood decay
Alison F. Wood	M.Sc. 1979	Saprobic abilities of <i>Rhizina undulata</i> Fries ^c

^a Coadvisor with RR. Hirt.

^b Coadvisor with PD. Manion.

^c Coadvisor with SB. Silverborg.

Lowe spent many summers in the Adirondacks conducting lichen and polypore research, and in the 1950s and 1960s he collected in western North America, several times accompanied by R. L. Gilbertson. Because the trips had to be organized around the academic calendar, many were forgettable, because western forests typically are dry in summer and few fungi fruited. The dry years faded from memory when in 1958 the rains preceded Lowe to Arizona. A decade later, he still recalled the prolific fruiting that year. He spent sabbaticals at Pennsylvania State College; North Carolina University; The Natural History Museum, Stockholm; Royal Botanical Gardens, Kew; and in Costa Rica. Lowe realized the benefits of such visits and urged students to get out into the world.

His title was research professor at the College of Environmental Science and Forestry when he retired in 1975 and became emeritus professor. Internationally recognized as an authority on the systematics of polyporaceae, he held grants from the National Science Foundation, for both fieldwork and travel to foreign herbaria, and the Society of the Sigma Xi. The Mycological Society of America helped finance his trip to Helsinki, where the P. A. Karsten-type specimens of polypores were studied.

After retiring Lowe hardly broke stride and diligently worked on a revision of his "Polypores of New York State." It remains an incomplete manuscript. Sadly Lowe was diagnosed with Alzheimer's disease in the 1980s.

His research focused on polypores, and today he would be considered a conservative taxonomist. He was satisfied with broad generic concepts because he thought that, when we better understood the species, the generic circumscriptions would be evident. And he focused on the clarification of species concepts and confirming that European names were correctly applied to North American collections.

Lowe's contributions were recognized by his peers on several occasions. The members of the Mycological Society of America elected him president in 1960 and in 1985 a distinguished mycologist. His 70th birthday was marked by the publication of a festschrift, with contributions from 35 mycologists and former students. In 1987, the State University of New York awarded him an honorary doctor of science degree. His academic achievements are recognized through The Josiah L. Lowe–Hugh Wilcox Graduate Scholarships awarded by his department, now named The Faculty of Environmental and Forest Biology.

Colleagues have acknowledged his influence by naming several species and genera after him, e.g., *Leptoporus lowei* Pilát, *Lindtneria lowei* M. J. Larsen, *Loweoporus* J. E. Wright, *Loweomyces* (Kotl. & Pouzar)

Julich, *Ploioderma lowei* Czabator, and *Polyporus lowei* Burdsall & Lombard.

Lowe freely shared his specimens and data with colleagues throughout the world, believing that there was more than enough work left for him to do. M. A. Donk (1974), in his monumental "Checklist of European Polypores", specifically acknowledged only two mycologists, and one was Lowe. In reflecting on his research, Lowe remarked that, when he finished, he hoped that he had made more correct decisions than incorrect ones.

He is survived by his daughter Gracia Lowe of Seattle; five brothers, Raymond and Wilber of Florida and Forrest, David and Wayne of Hopewell, New Jersey; and nieces and nephews.

THE WRITINGS OF J. L. LOWE

- Lowe JL. 1934. Notes on some species of *Polyporus*. Papers Mich. Acad. Sci., Arts Lett. 19: 141–148.
- . 1934. The Polyporaceae of New York State (Pileate Species). The New York State College of Forestry Technical Publ. 41. 142 p.
- Hedrick J, Lowe JL. 1936. Lichens of Isle Royale, Lake Superior. Bryologist 39: 73–91.
- Lowe JL. 1936. On the lichen flora of northern Michigan. Papers Mich. Acad. Sci., Arts Lett. 21: 119–126.
- . 1938. The distribution of some lichens in North America. Papers Mich. Acad. Sci., Arts Lett. 23: 163–169.
- . 1939. The genus *Lecidea* in the Adirondack Mountains of New York. Lloydia 2: 225–306.
- . 1940. A preliminary list of the lichens of the Huntington Forest (at Newcomb, N.Y.). Roosevelt Wildlife Bulletin 7: 371–382.
- . 1942. The Polyporaceae of New York State (Except *Poria*). The New York State College of Forestry Technical Publ. 60. 128 p.
- . 1943. *Cladonia alpicola* in New York State. Papers Mich. Acad. Sci., Arts Lett. 28: 63–65.
- . 1943. The fern allies. School Nature League Ser. 14: 4 p.
- Hirt RR, Lowe JL. 1945. *Poria microspora* in house timbers. Phytopathology 35: 217–218.
- , ———. 1945. *Polyporus versicolor* on Asiatic chestnut. Phytopathology 35: 574–575.
- , ———. 1945. Danger of decay in poorly seasoned lumber. Journal of Forestry 43: 717–718.
- Lowe JL. 1946. The Polyporaceae of New York State. The Genus *Poria*. The New York State College of Forestry Technical Publ. 65. 91 p.
- Overholts LO, Lowe JL. 1946. New species of *Poria*. Mycologia 38: 202–212.
- Lowe JL. 1947. Studies in the genus *Poria*. II. White and brightly-colored type material. Lloydia 10: 45–59.
- . 1948. Studies in the genus *Poria*. I. *Poria carneopallens* (Berk.) Cooke. Papers Mich. Acad. Sci., Arts Lett. 32: 99–101.

- . 1948. Studies in the genus *Poria*. IV. Brown type material. *Lloydia* 11: 163–170.
- . 1949. Studies in the genus *Poria*. III. White and brightly colored species. *Papers Mich. Acad. Sci., Arts Lett.* 33: 3–6.
- . 1952. Perennial polypores of North America. *Fomes* with colored spores. *Mycologia* 44: 228–238.
- . 1952. Southern and tropical polypores. *Papers Mich. Acad. Sci., Arts Lett.* 37: 49–53.
- . 1954. Studies in the genus *Poria*. V. *Papers Mich. Acad. Sci., Arts Lett.* 39: 31–35.
- . 1954. Perennial polypores of North America. II. *Fomes* with colored context, hyaline spores. *Mycologia* 46: 488–497.
- . 1955. Perennial polypores of North America. III. *Fomes* with context white to rose. *Mycologia* 47: 213–224.
- . 1956. Type studies of the polypores described by Karsten. *Mycologia* 48: 99–125.
- , Lundell S. 1956. The identity of *Polyporus trabeus* Rostk. *Papers Mich. Acad. Sci., Arts Lett.* 41: 21–25.
- . 1957. Polyporaceae of North America. The Genus *Fomes*. The New York State College of Forestry Technical Publ. 80. 97 p.
- . 1957. *Polyporus minusculoides* in America. *Papers Mich. Acad. Sci., Arts Lett.* 42: 37–39.
- . 1958. The genus *Poria* in North America. *Lloydia* 21: 100–114.
- . 1958. Studies in the genus *Fomes*. I. Some synonyms. *Papers Mich. Acad. Sci., Arts Lett.* 43: 147–149.
- Lombard FF, Davidson RW, Lowe JL. 1960. Cultural characteristics of *Fomes ulmarius* and *Poria ambigua*. *Mycologia* 52: 280–294.
- Lowe JL, Harlow WM, Walker J. (collaborators). 1960. Fungi [Los Hongos]. Video (VHS) 16 minutes. Produced by Encyclopaedia Britannica Films, London & Barcelona.
- . 1961. [Review of] Illustrated genera of wood decay fungi. *Mycologia* 52: 352–353.
- . 1961. [Review of] Illustrated genera of imperfect fungi, 2nd ed. *Mycologia* 52: 353.
- . 1961. Southern and tropical polypores, II. *Papers Mich. Acad. Sci., Arts Lett.* 46: 205–207.
- , Gilbertson RL. 1961. Synopsis of the Polyporaceae of the western United States and Canada. *Mycologia* 53: 474–511.
- , ———. 1961. Synopsis of the Polyporaceae of the southeastern United States. *Journal of the Elisha Mitchell Scientific Society* 77: 43–61.
- Gilbertson RL, Lowe JL. 1962. Notes on western polypores. II. New distribution records. *Papers Mich. Acad. Sci., Arts Lett.* 47: 165–179.
- Lowe JL. 1962. Studies in the genus *Poria*. VI. *Papers Mich. Acad. Sci., Arts Lett.* 47: 181–187.
- . 1962. [Review of] Lichen handbook. Guide to the lichens of eastern North America. *Mycologia* 53: 313.
- . 1963. The Polyporaceae of the world. *Mycologia* 55: 1–12.
- . 1963. A synopsis of *Poria* and similar fungi from the tropical regions of the world. *Mycologia* 55: 453–486.
- . 1963. Studies in the genus *Poria*. VII. *Papers Mich. Acad. Sci., Arts Lett.* 48: 165–175.
- Cooke WB, Lowe JL. 1964. The 1955 Michigan foray. *Mycologia* 56: 602.
- Lowe JL. 1964. The genera *Grammothele* and *Porogramme*. *Papers Mich. Acad. Sci., Arts Lett.* 49: 27–40.
- . 1966. Polyporaceae of North America. The genus *Poria*. New York State University College of Forestry Technical Publ. 90. 183 p.
- Gilbertson RL, Lowe JL. 1970. *Tyromyces graminicola* in North America. *Mycologia* 62: 699–706.
- Lowe JL, Lombard FF. 1973. On the identity of *Polyporus lacteus*. *Mycologia* 65: 725–732.
- , Pegler D. 1973. *Polyporus amygdalinus* and *P. pseudosulphureus*. *Mycologia* 65: 208–211.
- . 1974. Solution to a mycological mystery. *Bulletin de la Société Linnéenne de Lyon. Numéro spécial.* p 239–240.
- . 1974. [Review of] W. A. Murrill's Tropical Polypores. *Mycologia* 66: 556.
- . 1975. Polyporaceae of North America. The genus *Tyromyces*. *Mycotaxon* 2: 1–82.
- Lee TM, West LG, McLaughlin JL, Brady LR, Lowe JL, Smith AH. 1975. Screening for N-methylated tyramines in some higher fungi. *Lloydia* 38: 450–452.
- Lowe JL. 1976. On *Polyporus sobrius*. *Kew Bulletin* 31: 753–754.
- Ginns J, Lowe JL. 1983. *Macrohyporia extensa* and its synonym *Poria cocos*. *Can J Bot* 61: 1672–1679.

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LITERATURE CITED

- Donk MA. 1974. Check list of European polypores. *Verhandel. Koninklijke Nederl. Akad. Wetensch., AFD. Natuurkunde Tweede Reeks, Deel* 62:1–469.
- Lowe JL. 1963. The Polyporaceae of the world. *Mycologia* 55:1–12.
- Overholts LO. 1953. The Polyporaceae of the United States, Alaska and Canada. *Ann Arbor, Michigan: Univ. Michigan Press.* 466 p.
- Williams, Edith. 1977. Some reminiscences re Calvin H. Kauffman. *Boston Mycological Club Bulletin Number* 3:3–6.