Resolution of Respect

Elsie Quarterman
1910–2014

A Memorial: Elsie Quarterman 1910–2014

Well-known plant ecologist Elsie Quarterman died peacefully at home on 9 June 2014, at age 103, attended by her nephew Patrick Quarterman and his wife Ann. She was born on 28 November 1910, in Valdosta, Georgia, and at age nine her family moved to a farm nearby. She loved the many wildflowers of the piney woods of the farm and learned about them from a family friend who took Elsie and her mother on nature walks. Always interested in plants, she majored in English and minored in biology at Georgia State Woman's College (now Valdosta State University) and first met professional botanists through the college wildflower club.

Quarterman taught English and other subjects in Georgia public high schools for 10 years. She took biology courses in the summers at Duke University, and ultimately received an M.A. degree. During an ecology course taught by H. J. Oosting she found that communities were more interesting than individual plants, and decided to become an ecologist. At Duke she met Catherine Keever, who also was working on an M. A. in summers while teaching during the school year. They began a lifelong friendship that sometimes included research collaboration. Their first joint venture was writing a checklist of the flora of Highlands Biological Station in North Carolina. At Highlands, Quarterman met E. E. Remke, chair of the Vanderbilt University biology department, and he offered her a temporary job as a biology laboratory instructor in 1943. She took the place of a man who had left to join the military in World War II. After the sudden death of the botany professor, she was asked to take over the lecture portion of the course as well as teaching labs, essentially replacing both men.

Quarterman knew she needed a Ph. D. to be considered for a permanent position, so she contacted

Oosting about earning it at Duke, and they decided a study of the cedar glades on limestone outcrops around Nashville would be ideal. Though taxonomists had worked on individual species, the glades had not been studied by an ecologist. Thus began the research on cedar glade plants, some rare or endangered, that occupied her and most of her graduate students for 30 years. For some of her students and "grand-students," it still continues. Much later H. J. Oosting confessed that in the 1940s Duke didn't want female Ph.D. students, because they left academia after marriage. However, Elsie Quarterman, still unmarried in her late 30s, was considered a good risk!

Vanderbilt had no female faculty before World War II, and after the war, some professors proposed that the women be dismissed and replaced by men. During a faculty meeting the biology chair said his department would definitely not replace its woman, for she was one of their best teachers. Despite her gender, Elsie was promoted to a tenure-track assistant professorship in 1948. She received her Ph.D. from Duke in 1949, published her dissertation in 1950, was promoted to associate professor in 1952, and to full professor in 1966.

In the late 1950s Quarterman began to study the post-longleaf pine, hardwood-dominated forests of southern Georgia, which did not fit the accepted oak–pine–hickory model. She invited Catherine Keever, by that time on the faculty of what is now Millersville State University in Pennyslvania, to join her in a larger preliminary study. Encouraged by Oosting, she and Keever submitted a grant proposal to the National Science Foundation for a three-year study of hardwood forests across the Southeast. One person sitting on the grant evaluation panel reportedly said, "If these two fool women want to work among the chiggers, ticks, and cottonmouths of the southeastern forests, I say let 'em do it!" And do it they did, publishing their now-classic paper on Southern Mixed Hardwood Forests of the southeastern Coastal Plain in 1962. As an undergraduate research assistant to my Millsaps College major professor Donald Caplenor (Quarterman's first Ph.D. student at Vanderbilt), I was required to read that paper just a year after it came out, and it has influenced my research and writing ever since. In recognition of their joint and separate work on southeastern plant communities, the Southeastern Section of the Ecological Society of America has named its annual award for the best student poster the Quarterman-Keever Award.

Quarterman was on sabbatical (working with famous British plant ecologist John Harper in Wales) when I first arrived at Vanderbilt in 1964. I had never seen a picture of her, but an older student described her as "in her 50s" and "grandmotherly." At the end of the semester a tall, elegant, graceful, stylishly dressed woman appeared at a biology department seminar, and a fellow student told me that was Dr. Quarterman. Perhaps in her 50s—but hardly grandmotherly!

During the 1960s and 1970s, Quarterman had a laboratory full of Ph.D. and master's graduate students, all of us working on ecology of various cedar glade plants. Quarterman was not a hovering major professor; once she and her student had chosen a project, she allowed them great independence. When they finished, she told them it was unnecessary to include her name on their published papers, but that the work must be published. Papers from those students popped up repeatedly in *Ecology* and various botanical journals during those decades. Her surviving graduate students besides me include internationally known seed ecologists Jerry M. Baskin and Carol Caudle Baskin of the University of Kentucky; Thomas Hemmerly of Middle Tennessee State University, author of a superb book on Appalachian wildflowers; and Gail S. Baker of Northwest Florida College, who helped write this

memorial essay.

Quarterman had high energy and good administrative abilities, so her teaching, research, and supervision of graduate students did not prevent her from taking on other tasks. In the mid-1960s she was interim chair of the Department of General Biology, the first woman ever to chair a department at Vanderbilt. She was president of the Association of Southeastern Biologists in 1965–1966, and in 1972–1973 she served as acting director of Nashville's Cheekwood Botanical Gardens. Despite all these activities, she still had the time and energy left over to entertain and socialize with friends, which included browsing through antique shops with her friend and Vanderbilt colleague Ben Channell.

She retired from Vanderbilt in 1976, but continued her conservation work, serving as President of the Tennessee Environmental Council from 1979 to 1981 and working tirelessly to preserve cedar glade habitat and other unique areas in Tennessee, such as Radnor Lake and Savage Gulf. Quarterman received numerous awards for these efforts, including the Tennessee Academy of Science's Distinguished Scientist Award in 2003, the Tennessee Native Plant Society's Conservation Award, the Oak Leaf Award from the Tennessee Chapter of The Nature Conservancy, the Sol Feinstein Award from the College of Environmental Science and Forestry of the State University of New York, and a Lifetime Environmental and Conservation Achievement Award from the Tennessee Department of Environmental Conservation. Also, the annual spring wildflower event at Cedars of Lebanon State Park was renamed the Elsie Quarterman Cedar Glade Wildflower Festival; to preserve more glades, Tennessee has set aside the Elsie Quarterman Cedar Glade State Natural Area.

When I last saw Dr. Quarterman, she was 95 years old, still driving, and as eager as ever to discuss botanical subjects. Several of her former graduate students joined friends and family at Cedars of Lebanon State Park for her 100th birthday celebration, and although I wasn't there, I saw a video of her address to the crowd. She was thinner and her hair was whiter, but otherwise she looked much as she had decades before. Elsie Quarterman lived a very long, healthy, happy, and very productive life. She was an inspiration to all of us.

Selected works

Quarterman, E. 1950. Major plant communities of Tennessee cedar glades. Ecology 31:234–254.

Quarterman, E. 1957. Early plant succession on abandoned cropland in the Central Basin of Tennessee. Ecology 38:300–309.

Quarterman, E., and C. Keever. 1962. Southern Mixed Hardwood Forest: climax in the southeastern Coastal Plain. Ecological Monographs 32:167–185.

Quarterman, E., B. H. Turner, and T. E. Hemmerley. 1972. Analysis of virgin mixed mesophytic forests in Savage Gulf, Tennessee. Bulletin of the Torrey Botanical Club 99:228–232.

Stewart Ware
Professor of Biology, Emeritus
College of William and Mary
Williamsburg, Virginia 23187-8795