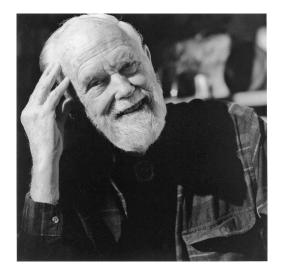
In Memoriam Richard Hale Goodwin 1910–2007 Botanist, Teacher, Conservationist, and Mentor



What I have done in this life has not been motivated by an effort to save myself from unpleasant experience in the next, but rather, at least in part, by a desire to preserve the beauty and biological integrity of the earth we have inherited.

Dick Goodwin was many things, each characterized by dedication, accomplishment and a twinkling smile: scientist, professor, conservationist, and perhaps surprisingly, savvy businessman. Above all, he was a friend and mentor who valued family and close relationships with colleagues and maintained an unflinching commitment to the considerate treatment of all humans and the earth. Though quiet in his accomplishments, Dick's passion led to achievements that warrant superlatives. Committed to field botany, Dick was the youngest, oldest, and longest standing member (76 years) of the New England Botanical Club. Passionate to preserve the natural world, he helped launch The Nature Conservancy, served as its president (twice) and guided its transformation from volunteer operation to a national professional organization; he built Connecticut College and his Burnham Brook home in East Haddam, Connecticut into regional centers for conservation and ecology; and he founded and funded the Conservation Research Foundation to "support undernourished causes in the fields of conservation and biological research." Meanwhile, as an inspiring teacher, Dick launched one of the first college environmental studies initiatives in the country, the Human Ecology program at Connecticut College, which has grown since 1969 to become the innovative Goodwin-Niering Center for Conservation Biology and Environmental Studies.

Extending nearly a century, Dick's ventures were so varied that few people, even friends and colleagues, could appreciate them all. Certainly, that was my experience. In 1973, disillusioned with science and having just declared my major in religious studies at Connecticut College, I was advised by my future wife to take a course in plant taxonomy to inform my lengthy rambles through the New England countryside. With the regular professor on sabbatical leave, we were exposed to two "professors." Dick lectured in class, and Esther, his wife, joined us exploring nature reserves, most of which, I later learned, Dick had helped preserve. Based on this inspiration, I added botany as a second major and have spent the next three decades trying to fathom all that Dick has accomplished. From

cytogenetics and landscape preservation to living life fully with Esther, Dick was motivated "by a desire to preserve the beauty and biological integrity of the earth that we inherited." Fortunately, in his deliberate way, Dick left an autobiography to assist our inquiries: *A Botanist's Window on the 20th Century* (Goodwin 2002).1

Dick was born on December 14, 1910 in Brookline, Massachusetts, the son of Mary Blanchard Linder Goodwin and Harry Manly Goodwin, Professor of Electrochemistry and Dean of Graduate Students at MIT. Dick received much from his parents. From his father came deep appreciation for the mentoring of students and critical thinking, exposure to wilderness, western landscapes and rock climbing in the Italian Alps, and his middle name, which derives from Harry's closest friend, the renowned astrophysicist George Ellery Hale. From Dick's mother came his dedication to social causes, interest in natural history, foreign language and travel, and commitment to apply personal resources to meaningful purpose. The family lineage was distinguished and prosperous. Great grandfather John Smith Farlow, an Irish immigrant, made a fortune in railroads, whereas one grandfather, Richard D. Goodwin, was a partner in a Boston clothing manufacturing firm and the other, George Linder II, built a successful chemical import business. The Farlow family yielded botanical scholars as well. Dick's great uncle William Gilson Farlow was the father of cryptogamic botany in the U.S. and namesake of Harvard University's Farlow Herbarium, which was formed around a nucleus of his books and plant collections. Meanwhile, Dick's uncle and Farlow's great nephew, David Linder, moved from the Missouri Botanical Garden some years later to direct the Farlow.

Remarkably, for a man of his longevity and resolute toughness, Dick had a sickly childhood marred by bouts with influenza, whooping cough, asthma, and bronchitis but invigorated by great times and camping trips with his friends in Brookline's Boy Scout Troop 4. Six memorable family excursions took him across the western United States. Traveling through Yosemite, Yellowstone, Zion, Bryce, Glacier, Mesa Verde, and other national parks exposed Dick to nature's splendor and its mixed relationship with man. One indelible impression came passing through Minnesota in the 1920s when Dick's family confronted seemingly endless forests devastated by fires and logging. Dick later remarked that this experience of human negligence and environmental destruction instilled the notion that he "might be able to contribute to the rehabilitation of devastated country." With this thought and motivation Dick entered Harvard in 1929 with the "somewhat nebulous idea that I might become a forester."

At Harvard, Dick lived a young biologist's dream, taking courses from a cast of luminaries who provided inspiration for a budding scholar. Botany was taught by Ralph Wetmore in a course with G. Ledyard Stebbins as teaching assistant. Taxonomy came from Merritt Lyndon Fernald, who Dick described as a bit rambling in the classroom but boundless in enthusiasm and information in the field. Plant Anatomy was led by E. C. Jeffrey. Dick acquired his first laboratory experiences at benches overseen by Kenneth Thiman and Irving Bailey, who introduced him to hormone studies and careful research techniques, respectively. To complement these laboratory and lecture courses and to expand on his western experience, Dick headed out the first summer to the University of Wyoming for Professor "Doc" Knight's field geology course. The following summer he joined his old Boy Scout chum and fellow Harvard student Charlie Denny in Kirk Bryan's renowned geology field course exploring remote sites and Indian ruins in New Mexico. The experience solidified Dick's enthusiasm for intact nature and appreciation for broad-scale landscape processes, while they led Denny to graduate studies with Bryan and a distinguished career in geomorphology.

As an upperclassman, Dick became absorbed in an independent project with Ralph Wetmore exploring hybridization among goldenrods, especially the common *Solidago rugosa* and the coastal *S. sempervirens*. Initial success in crossing these to produce *S. asperula* led Dick to graduate work with Wetmore, studying meiotic behavior, chromosomal variation, and hormonal control of plant morphogenesis. Among other benefits of the Harvard graduate experience was the opportunity for tropical exploration. This included a summer trip in 1931 to the Atkins Garden in Cuba and Barro Colorado in Gatun Lake on the Panama Canal.

Following defense of his Ph.D. in 1937, Dick sought out emerging work on plant hormones by traveling to Denmark and the University of Copenhagen laboratory of Professor Boysen-Jensen, which

was focused on the study of growth inhibitors. Foreshadowing future connections in Dick's life, this Danish work had become widely known through a translation by George Avery at Connecticut College. Following a year abroad and with expanding skills and numerous research publications, Dick received a faculty offer from the University of Rochester. He headed to New York in 1938 and was immersed in a stimulating environment surrounded by superb colleagues in physiology, anatomy, and genetics.

As a student at Harvard, Dick developed a passion for field botany by accompanying other students, superb amateurs, and faculty members, especially Fernald, on collecting forays, and by joining the New England Botanical Club in 1931. He promptly applied this experience in Rochester by assuming responsibility for the herbarium and its large accumulation of uncurated specimens. Over the next six years Dick worked through the entire collection, including countless plants from many new field studies. These efforts led to a series of publications on new records and floras for local sites, some of which became subsequent targets for protection due to their unusual environments and diversity of species.

In Rochester, Dick and Esther established their family and solidified a marriage that had been launched in grand style in 1936 when they spent a postponed honeymoon on a five-week excursion through East Africa. In an eye-opening voyage that included hiking, climbing, driving, and viewing the Usambara Hills, Mount Kilimanjaro, the Jaida Swamp, Uganda's Mount Elgon, the east edge of the Congo, and Lake Victoria, the couple initiated a tradition of travel and excursion that would come to characterize the family's future life together. In 1939 Minda, as Mary Linder was soon known, was born. Richard Hale Goodwin, Jr. followed less than two years later. Minda would later recount that Dick usually joined the family for lunch during their childhood. Both children's memories are filled with field trips, canoe trips in New England, and adventures from Europe to Costa Rica where Dick always shared his botanical, geological, and ecological excitement.

Recognizing Dick's reputation for teaching, research, and field botany, and undoubtedly glimpsing his many latent talents, Connecticut College surprised Dick in 1944 with a remarkable offer: full professorship, directorship of the Connecticut Arboretum, the freedom to pursue teaching, research, and administration in equal measure, and a full-time research assistant. This opportunity arose upon George Avery's departure for the Brooklyn Botanic Garden and it provided Dick with a wonderful platform for exploring new fields, applying his vision towards new causes and, eventually, building great and lasting institutions. The range of directions he promoted and the scope of his accomplishments are a tribute to his effectiveness as an administrator and his personal talents working with diverse individuals and organizations.

While in Rochester, Dick had joined an effort to preserve the 2000-acre Bergen Swamp, a calciumrich wetland that harbored a diverse array of plants and animals. This experience provided his first introduction to natural areas preservation and the challenges of assembling the diverse properties required to protect intact ecosystems. Recognizing the strategic need to buffer the vulnerable 90-acre Connecticut Arboretum from New London's suburban expansion, Dick reenergized George Avery's acquisition efforts and initiated a land protection program that eventually secured more than 750 acres (Goodwin 1991). Through the years, this effort involved shrewd negotiations with neighbors, landowners, and supporters as well as college administrators. It also involved negotiating deals for more than 20 tracts and 456 acres ranging from the brackish marsh and rocky upland forests of Mamacoke Island in the Thames River to old fields, wetlands, and magnificent forests surrounding campus. In 1952 the central and most rugged section of the Connecticut Arboretum was designated the Bolleswood Natural Area, one of the first such preserves in Connecticut. In 1996, and in recognition of the critical role of the Arboretum in defining the character of the school, Connecticut College designated the entire campus part of the Arboretum.

Dick was instrumental in bringing Bill Niering to New London in 1952 following his Ph.D. at Rutgers. This critical appointment greatly expanded the intellectual breadth of the college in the important direction of ecology. Although the two men presented striking contrasts in lifestyle, background, research, and personality, their shared commitment to understanding and protecting nature and the environment transformed these differences into complementary strengths. Together Dick and Bill established a system of permanent plots across the Bolleswood. They then engaged undergraduate and graduate students in sampling vegetation, birds, and the environment to provide an unrivaled record of change in a rapidly suburbanizing landscape (Niering and Goodwin 1962). At the College they joined other faculty to develop powerful programs in botany, zoology, and environmental sciences. On and beyond campus, they provided early and fervent voices alerting student and public audiences to the threats of pollution, pesticide use, nuclear energy, and population explosion and the need to conserve energy, resources, and land.

Dick was also joined by Bill in many conservation pursuits across and beyond New England. Dick had joined The Nature Conservancy (TNC) the year of its incorporation and a year later, in 1952, he became the organization's Connecticut representative. That year he helped form the Connecticut Natural Areas Committee, which he chaired until 1956 when Bill succeeded him and Dick assumed the national presidency of TNC. These were early days in private land protection, locally and nationally, and these efforts critically required the means to finance deals and ensure that land protection was permanent. Meanwhile, TNC was largely created and directed by scientists and it was in desperate need of institutional structure for governance, staffing, finance, and growth (Birchard 2005). With his administrative and financial skills, Dick was perfectly prepared to address these needs. At TNC, he helped reorganize the national office and corporate structure, hire the first executive director, and secure major individual gifts and the initial Ford Foundation grant needed to underwrite organizational expansion. He was also instrumental in crafting and closing the group's first large and complicated land deal, the North California Coast Range Preserve. Funding for this purchase included a ten-dollar donation from Dick's introductory biology class and a \$5000 seed grant from the Conservation Research Foundation, which Dick and his mother established in 1952. Closer to home, Dick and Bill played a central role in protecting Beckley Bog, a beautiful black spruce wetland in Norfolk that was TNC's first purchase in Connecticut.

Between his two stints as TNC president, Dick initiated one of his most significant and personal conservation efforts, the Burnham Brook Preserve. Started as a joint venture with John and Margaret Ide, the initial 170 acres eventually became Dick and Esther's home and connected with Devils Hopyard State Park to form a tract exceeding 2000 acres. Burnham Brook was one of TNC's earliest Connecticut preserves, extending nearly to the Connecticut River and protecting an integral part of the Eight Mile River watershed, a regional conservation priority.

As significant as the land he protected, is Dick's legacy of ingenuity in constructing and financing conservation deals and ensuring permanent stewardship. With diverse landowners and scarce funds, every conservation transaction must be individually crafted and financed. Dick recognized this early on and he became masterful in addressing these needs. His personal connections with landowners were critical to success and his creativity in financing should be required reading for every conservation group. Above all, his success lay in his personal commitment to each effort and the healthy skepticism towards large institutions that he applied in crafting language to ensure protection in perpetuity. I recall vividly the tinge of pride in Dick's voice when he described to our class the deed crafted for Connecticut College's ownership of Mamacoke Island. The terms required that the land remained in an undeveloped and natural state. If such stewardship proved onerous the land could be sold, but it must be offered first to TNC or the Connecticut Forest and Parks Association for \$500. While Dick believed that Connecticut College was well intentioned, he wanted to ensure that future administrators would remain devoted to conservation. In similar fashion, while his final book is largely a personal history of life with Esther assembling and studying Burnham Brook, the volume also serves as an additional layer of land protection for this important tract (Goodwin 2006). Along with many historical insights, the pages present a clear Goodwin vision to encourage future stewards to stay true to the inspiration that assembled the land in the first place.

Dick Goodwin was a dedicated man with diverse talents, a huge heart, a marvelous sense of humor, and a healthy understanding of his place on earth. A sense of the drive, compassion, and humility that encompassed him emerges in the last verses of "For Esther," one of many poems in his autobiography.

This world of ours has need of those who deeply care There's work for us to do this very day And joy attending this enterprise we share Together. The apple has been plucked. We may not stay.

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