



IN MEMORIAM

RICHARD ALDEN HOWARD

1917–2003

TWO forces of nature hit Massachusetts in September 1938. The Great Hurricane swept through on the 22nd, dramatically altering New England's landscape. Richard Alden Howard arrived in Cambridge that same week to make his own, far more positive, impact on Harvard's landscape and, later, on the 265 acres at the Arnold Arboretum in Jamaica Plain, Massachusetts.

Howard was born in Stamford, Connecticut, and reared in Warren, Ohio. He graduated from the Botany Department at Miami University in Ohio in 1938. Afterward, unable to afford graduate school, he accepted a position as a technician at Harvard University under Irving W. Bailey. Bailey put him to work on a little-known group of tropical flowering plants, the Icacinaceae. Howard also attended classes, and in 1939 the Society of Fellows awarded him a Junior Fellowship that supported his postgraduate training. As a graduate student, he had the opportunity to visit Harvard's Atkins Garden at Soledad, near Cienfuegos, Cuba. The experience inspired both his life-long interest in tropical plants and his relationship with the scientists in the Caribbean. It was also where he met one of the great plant explorers, David Fairchild. After travel to Cuba became restricted, Howard continued his tropical research and teaching efforts at the Fairchild Tropical Garden in Miami and visited Fairchild's estate, the "Kampong," in Coral Gables, Florida.

Howard continued the work he had started under Bailey on the Icacinaceae and completed his doctorate in 1942. His thesis, entitled "Studies of the Icacinaceae: A monograph of the New World species," was later published in a series of papers.

The country was at war. Howard wanted to enlist in the United States Navy but was rejected because his height of six-feet-five-inches exceeded U.S. Navy limits. Instead, he entered the Army Air Corps where his combination of leadership and teaching skills and practical knowledge of tropical plants led to his assignment

Clockwise from top left: On a field trip in the Lesser Antilles, Richard Alden Howard holds specimens of a plant so rare it defied identification. He located it on a spur of St. Vincent's original volcano, north of the then-active crater lake.

Dr. Howard, Harvard botanist Lily M. Perry, and Yin Hung-chang, director of the Shanghai Plant Physiology Institute, photographed during the 1979 visit to the Arboretum of a delegation of botanists from the People's Republic of China.

Colleagues Carroll E. Wood, Jr., and Howard with plant specimens in Professor Howard's office in the Harvard University Herbaria

Howard, at left, as a graduate student in Cuba.

Director Howard takes his turn with a spade at the 1961 groundbreaking ceremonies for the Arboretum's Dana Greenhouses. At his left are George Taylor, director of the Royal Botanic Gardens, Kew; Bradford Washburn, director of Boston's Science Museum; and Nathan Pusey, president of Harvard University. All photographs are from the Archives of the Arnold Arboretum

with the newly established Research and Rescue Program of the Air Force. He was appointed its first director and devoted the rest of his time in service to teaching airmen how to survive adrift on desolate oceans, in freezing snow, scorching sands, and sweltering jungles. He wrote survival manuals (some published by the Arctic, Desert, Tropic Information Center (ADTIC)). When he left the service, he was a captain, and he continued as a consultant to ADTIC for several years. The Air Force recognized his contributions by presenting him with the Legion of Merit award in 1947. Howard continued not only to write but also to collect survival manuals, and amassed a unique collection that he donated to Harvard's Houghton Library in 1998.

Following the war, Howard and his bride, Elizabeth "Betty" Solie, moved to New York, where Howard worked as a curatorial assistant at the New York Botanical Garden. In 1948 he was called back to Harvard as an assistant professor responsible for the botanical semester of the large introductory biology course. He proved to be a popular and innovative lecturer who often provided generous supplies of edible plants to demonstrate his belief that the best way to a student's mind was through his stomach. At the same time, he published papers on the floristics of the West Indies and New England.

In 1953 the University of Connecticut appointed Howard professor of botany and department chair. His stay in Connecticut was short-lived since he was recruited back to Harvard in 1954 as director of the Arnold Arboretum and the Arnold Professor of Botany.

Howard's new challenge was to guide the Arnold Arboretum through a period of tremendous change and turmoil. Controversy surrounded Harvard's decision to move portions of the Arboretum's herbarium and library from Jamaica Plain to a new facility in Cambridge. Despite an atmosphere charged with tension, Howard forged ahead. He possessed the stamina, integrity, and sense of humor to carry him through a contentious decade. Critics were won over by his zealous promotion of the Arnold Arboretum and all things botanical and horticultural. He gave countless lectures at garden clubs and cultural organizations and presented his lecture "A Botanist in Your Grocery Store" more times than he could recall. Among his other favorite talks were "Botany in Boston Restaurants," "Jungle Housekeeping," and "South to the Antilles." He was in such demand that he often joked about "living out of a suitcase for weeks on end," but he knew that he was rebuilding a support network and he channeled all of the honoraria back into the Arboretum's public education programs.

Howard encouraged the Arnold Arboretum staff to become active in local, national, and international botanical and horticultural organizations. He and staff members were soon involved in the Horticultural Club of Boston, the Massachusetts Horticultural Society, the New England Botanical Club, the American Association of Botanical Gardens and Arboreta, the American Society of Plant Taxonomists, the Botanical Society of America, the International Association of Botanical Gardens, and the International Society of Plant Taxonomists. Howard served as an officer for many of these organizations. He also encouraged the library

staff to join the newly organized Council on Botanical and Horticultural Libraries when it held its first meeting in Boston in 1968.

During his twenty-four years as director, Howard assembled a capable team to advance the mission of the Arnold Arboretum. He was interested in every aspect of the operation and made himself available to his staff when decisions were needed. He acknowledged both personal and professional achievements and milestones of the staff and volunteers in the *Arboretum Newsletter* and in his annual *Director's Report*. He restored the botanical and horticultural reputation of the institution, improved the grounds, and built greenhouses. While cultivating mutually beneficial relationships with the City of Boston and its Parks Department, at the same time he thwarted attempts by the city to reclaim portions of the Arboretum for other purposes. Computerization of botanical records was in its infancy, and Howard was among the first to introduce this new record-keeping system to the Arboretum. He bolstered the Arboretum's public education program, introduced innovative uses for the Arboretum's Case Estates in Weston, Massachusetts, and promoted major research projects like the Generic Flora of the Southeastern United States in the *Journal of the Arnold Arboretum*. Howard shuttled from his home at the Case Estates to Jamaica Plain and then on to Cambridge nearly every day for almost twenty-four years. He maintained two offices and supervised staff on both sides of the river. His motivation was clear, his energy boundless. He considered his success at the Arnold Arboretum to be his greatest professional achievement.

Howard was not content to limit the Arnold Arboretum's research program to his own sphere of interests. In the early 1970s he took every opportunity to rebuild relations with botanical institutions in China. By the mid-1970s he had succeeded in renewing the exchange of specimens, and in 1978 he was able to visit colleagues there as a member of the Botanical Society of America's delegation. In 1980 the Arnold Arboretum resumed its botanical work in China by sending a new team of botanical explorers and hosting a stream of Chinese botanists in Cambridge to collaborate on the Flora of China project.

Professor Howard continued to teach in Cambridge and to lead Harvard students on field trips to Cuba until the formal relationship with the Atkins Garden ended in 1961. From then on, he conducted his field studies in the Everglades and elsewhere in subtropical Florida but continued to correspond and exchange materials with his Cuban colleagues.

Howard also devoted time to collecting on islands throughout the Caribbean, frequently traveling with colleagues and family members. He joked about the wisdom of choosing to explore the tropics, but the work was often dangerous. He and his team worked in remote locales, trekked over rough terrain, and scaled slick volcanic mountainsides.

Howard's extensive knowledge of tropical vegetation was put to practical use. Aluminum companies sought his help in the revegetation of strip-mining sites in Jamaica and later in Hawaii. A grant from the National Science Foundation permitted him to study the montane elfin forests at Pico del Oeste in the Luquillo

Mountains of eastern Puerto Rico, a project that resulted in seventeen papers. The Boston Poison Information Center relied on his advice about poisonous plants, and he was "on call" to them for many years.

The work that represents the culmination of Howard's research in the West Indies is the six-volume *Flora of the Lesser Antilles* (1974–1989). In the foreword to Volume One, Howard wrote, "Since the time of the voyages of Columbus much botanical data has been assembled from the various islands of the Lesser Antilles. Yet, after almost five hundred years, a unified and comprehensive account of the specific components of the vegetation that flourishes on that chain of islands is still wanting. The launching of the publication . . . is aimed to fill this gap just before the last steadfasts of our natural vegetation succumb to the recklessness of man and his civilization . . . The undertaking of the preparation of a definitive flora dates back to some twenty years involving both extensive field work, combined with exploration, and intensive research in herbaria." The series was completed in 1989 and it is still a standard reference work on Lesser Antilles flora.

Professor Howard asked to be relieved of his administrative duties in 1978. He continued his teaching and research as professor of dendrology in Cambridge. His courses ranged from introductory botany to graduate level classes in advanced plant anatomy and the phylogeny of flowering plant families, and he was proud to have supervised three graduate students. In 1988, when he reached mandatory retirement age, he taught his last course at Harvard: "Plants and Human Affairs." He was asked to substitute at the last minute but did not hesitate to accept since it was a course that he had always wanted to teach. His research during this period focused on his extensive survey of the nodal and petiolar structure of the vascular conducting system through which plants move materials between leaf blade and stem. Howard left Cambridge briefly from July 1989 until September 1990 to serve as the vice president for science at the New York Botanical Garden.

Howard was an international goodwill ambassador for the botanical and horticultural sciences. In 1963 he made a world tour, visiting gardens and herbaria at every stop, collecting whenever he could, and photographing plants and people to add to his already voluminous collection of Kodachrome slides. He served on boards and consulted at established or new botanical and horticultural organizations like the Pacific Tropical Garden based in Kauai, Hawaii (now the National Tropical Botanical garden), the Acton (Massachusetts) Arboretum, the Coastal Maine Botanical Garden, the Fairchild Botanical Garden, and the beloved Kampong. He was thrilled to return to Cuba and the garden at Soledad in 1999 with a delegation sponsored by Harvard's David Rockefeller Center for Latin American Studies. In a surprise finale to the conference, the Cuban delegation planted two new palm trees in his honor.

Over a sixty-year period Howard published thirteen books and more than three hundred papers. Their depth and breadth reflect his eclectic interests. He wrote on plant anatomy and morphology, floristics, cultivated plants, economic botany, tropical ecology, biogeography, the social and economic history of the West Indies, the lives of botanists, and botanical trivia. Even in his later years, when

his eyesight and general health began to fail him, he spent his good days working in the library on various projects and manuscripts.

During his long career Howard received many awards. The Jamaica National History Society, the Montserrat Natural History Society, and the Montserrat National Trust acknowledged his botanical contributions to their islands. The American Association of Botanical Gardens and Arboreta, the American Herb Society, the American Horticultural Society, the Garden Club of America, the City of Boston, the Massachusetts Horticultural Society, and the National Council of State Gardens bestowed horticultural awards upon him. He was named an honorary fellow of the Danish Royal Academy of Arts and Sciences and received the Distinguished Citizen Award from his hometown of Warren, Ohio. He was named an honorary Doctor of Science at Framingham State University in 1977. In 1999 the National Tropical Botanical Garden awarded him the Allerton Award in recognition of his decades of service in the advancement of tropical horticulture and the understanding of tropical plants.

Howard was a member of the New England Botanical Club from 1940 until his death. He served as president in 1953 and held the record of most-often-featured speaker at the Club's milestone meetings—the 700th, the 800th, and the Centennial. At the centennial meeting Howard was not content merely to summarize the highlights of one hundred years of the organization; he commissioned noted author Maurice Sagoff to compose a poem about the NEBC, which he read at the end of his speech.

The Howards reared four children, Jean, Barbara, Bruce, and Philip, and the family shared many botanical adventures. Betty co-authored several papers with her husband and edited many more. She co-hosted open houses, exotic botanical-theme dinners for international dignitaries, impoverished students, and prospective faculty and staff. She was a true partner in Howard's life, traveling the world with him and managing their family and home when he was off on his own. They were proud of their children and eight grandchildren and in later years looked forward to annual family reunions in Florida. (Of course, Howard timed the reunions to coincide with his work on the inventory of plants at the Kampong.)

Richard Alden Howard's legacy to Harvard and to the fields of botany and horticulture are as large as his life. The citation presented to him by Framingham State College in 1977 is an apt tribute. It reads, "Scholar, interpreter of the world of plants to people of all ages, botanical explorer of the world's remote corners, entrusted with the care of our botanical treasures, he has taught us survival in the wilderness and the beauty of civilized nature."

—Judith A. Warnement, Librarian, Harvard University Herbaria, and Carroll E. Wood, Jr., Professor of Biology emeritus, Harvard University.

Acknowledgments

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